

Annual Report and Accounts

for the year ended 31st December 2014

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:
 - 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 2014 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.

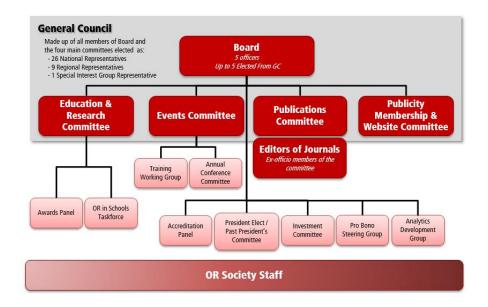
The following served as members of the Board in 2014

S L ROBINSON President J D GRIFFITHS
J R HOPES Vice President R A KAUFMAN
S PETROVIC Vice President F A O'BRIEN
G H ROYSTON Past President 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)
Analytics Development Group	(a)

(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:

Its Bankers are:

l G Blackett

The Co-operative Bank

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

WN8 6WT

Its Solicitors are:

Its Auditors are:

Sydney Mitchell and Co Cavendish House Waterloo Street BIRMINGHAM B2 5PU Mazars LLP 45 Church Street BIRMINGHAM

B3 2RT

Its Investment Adviser is:

Its Stockbrokers are:

Elliot Bancroft

Investec

Investec

2 Gresham Street

2 Gresham Street

LONDON EC2V 7QN

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 OR 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.

In governing the OR Society, the Trustees have had regard to the Charity Commission's public benefit guidance.

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 2014, three members of the Board completed their term of office: G H Royston, R A Kaufman and J K Smedley.

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 2014, and recommend their adoption by the Society at its Annual General Meeting.

S L ROBINSON President R A FORDER Hon Treasurer

S BEG J D GRIFFITHS J R HOPES R A KAUFMAN M H KUNC

F A O'BRIEN J PARKIN S PETROVIC A F SHEEN

Being the elected officers and members of the Board of the Operational Research Society as at 20 May 2015.

I G Blackett Secretary & General Manager 20 May 2015

Annual Report 2014

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** 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 2014. 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 2014 the Society's publications, website, conferences, training, accreditation, awards, regional societies, special interest groups, charitable projects, outreach to schools, pro bono scheme 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 introduction of free student membership which led to an almost three-fold increase in the number of student members, an increase of 188% over the year;
- The 2014 Blackett Memorial Lecture was given by Professor Sir Bruce Keogh on the topic "Challenges Facing the NHS." Demand was such that the lecture had to be held at a new location – the Grocers' Hall;

- The first stand-alone Beale Lecture was held at the Royal Society in February, delivered by Mark Elder (2012 Beale Medal winner). Richard Wood (2011 Doctoral Award winner) also presented at the event;
- A third analytics event was held in London in April 2014 with an impressive set of speakers;
- The Annual Conference (OR56) was held at Royal Holloway University of London, and the biennial Simulation Workshop (SW14) took place at the Abbey Hotel, Redditch;
- Work towards the launch of a new magazine, *Impact*, aimed at practitioners and users of O.R. started, with Graham Rand as editor;
- The first two books in a new book series O.R. Essentials, edited by Simon Taylor, were published;
- The Analytics Development Group was established to advise the Board on the Society's strategy for analytics;
- A Strategic Projects Manager (Louise Allison) was employed, who in the first instance will
 focus on developing the membership offering and on the analytics initiative;
- Two new special interest groups (SIGs) were launched on Behavioural O.R. and Public Policy Design, meanwhile, the Simulation and System Dynamics+ SIGs merged into a single Simulation SIG;
- Three charitable investment projects were funded and completed.

Board Business

The Board met five times during 2014. In addition, to facilitate communication, over the same period two special meetings were held between the Board and General Council members ('mega-meetings').

The membership of the Board remained the same as in 2013. Stewart Robinson, formerly President—Elect, commenced his two-year presidential term and Geoff Royston continued on the Board as Immediate Past-President. At the end of 2014 Ruth Kaufman, Geoff Royston and Jo Smedley all completed their term on the Board. Ruth Kaufman returns to the Board in 2015 as President-Elect and we welcome three new members: Sayara Beg, Martin Kunc and Alex Sheen.

The Board finalised and approved the Annual Report and Accounts for the year ending December 2013 and recommended it be proposed for approval at the Annual General Meeting. It was approved at the AGM held on 9 July 2014 and is available online on the Society's website. During the year the Society drafted a substantially revised risk register and the Board started a review of the constitution with a view to completing these in 2015. At the October meeting the Board reviewed progress on the committee actions in the 2014 business plan.

The Board considered the financial position of the Society and noted that it remained reasonably strong, particularly owing to the continuing contribution from our journals. Following the agreement in the previous year to invest some of the Society's funds in activities that would bring future benefits to the health of the Society and the achievement of its charitable aims, expenditure was committed to the launch of a new magazine, *Impact*, and to a new role, Strategic Projects Manager, to support

developments in analytics and membership. Given the continuing strong position of the Society's finances, at the end of 2014 the Board started to consider further investment project opportunities.

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 January 1st 2015. The new rates were approved by the required 75% majority at the AGM.

Following a detailed report from the Publicity, Membership and Website Committee, it was agreed to move forward with free student membership. The primary aim is to develop a larger network of student members with a view to converting them to full paid membership in the longer term. Following implementation in the autumn of 2014, the number of student members rose by 188% over the year.

As noted above, the Board agreed to fund a new magazine-style publication called *Impact*. Graham Rand agreed to be Editor for this publication which in the first instance will publish two issues per year. An implementation working group was set-up to oversee the launch of the magazine and professional writers have been engaged for generating content. The first issue was published in spring 2015. Meanwhile, a book series *O.R. Essentials*, published by Palgrave, is in progress with Simon Taylor as series editor. Two books have already been published (*Agent-based Modelling and Simulation*, and *O.R., Defence and Security*) with others in the pipeline. Consideration was also given to better controlling the costs of *Inside OR* which had grown to more than £100k per annum. As a result, each issue now works to a page budget of 32 pages. This has seen the introduction of an 'in-brief' section in the magazine, which has received positive feedback from readers.

The Board noted that 2014 had been a very successful year for events, especially the annual conference at Royal Holloway University of London in September. The first stand-alone Beale Lecture was held at the Royal Society on 27 February, delivered by Mark Elder (2012 Beale Medal winner). Richard Wood (2011 Doctoral Award winner) also spoke at the event. The conference schedule for 2015 includes the EURO conference in Glasgow and Young OR in Birmingham (moved to September from its usual spring date due to the EURO conference). The on-going administrative burden of running the full range of conferences and events will be monitored.

In 2014 the Society provided £5k sponsorship for the Student Conference on O.R. (SCOR 2014). The Society also provided 1,000 Euros to the International Conference on O.R. for Development (ICORD), to help pay the cost of attendees from developing countries. ICORD 2014 took place in Barcelona immediately before the IFORS (International Federation of O.R. Societies) conference in July.

The Board approved the proposals of the Training Working Group for the courses to be offered by the Society in 2015. The Board discussed the Society's training strategy and asked Events committee to look at this in more detail.

Jörg Fliege (Southampton University) replaced Jeff Griffiths as OR Society representative on the Council of Mathematical Sciences. The Board agreed that in future the posts of EURO and IFORS Representatives should be combined and, like other Society positions, it should carry a three year term of office.

There continue to be signs that the slow decline in subscribing members seen over recent years might be beginning to reverse, but there is clearly work still to be done on this. The Board considered a report from the Publicity, Membership and Website committee recommending that we introduce free student membership. The Board agreed to put this to the AGM and it was subsequently agreed. Free student membership was introduced for the autumn of 2014 and it has resulted in an immediate substantial increase in numbers to almost three times the previous level of student members. The introduction of a corporate membership offer in 2013 has so far seen only three organisations take this up. The Board continues to note that the Society is attracting interest from people through pathways other than subscription membership, especially through social media. Discussions over the opportunity to develop a wider 'O.R. Network' led to an MSc student project that investigated the potential for such a network. The Board considered a report from the Membership Working Group and PMW recommending the appointment of additional resource to support membership recruitment and retentiion, and subsequently appointed a Strategic Projects Manager (Louise Allison) in 2014, 50% of whose time is devoted to supporting membership developments.

A third analytics event was held in London in April 2014 with an impressive set of speakers. The Board continued to promote and monitor activity in the analytics area leading to three specific initiatives:

- To establish an Analytics Development Group to develop and put into operation the Society's strategy around analytics. This group is led by Vice-President John Hopes and replaces the Analytics Working Party.
- To open dialogue with INFORMS on the potential for the Society to offer the INFORMS CAP
 (Certified Analytics Professional) qualification. Stewart Robinson had a discussion with Steve
 Robinson (INFORMS President) and Melissa Moore (INFORMS Executive Director) at the IFORS
 conference in Barcelona. Dialogue is continuing with INFORMS who are favourable to the
 idea.
- To launch a journal on analytics. Several potential editors pulled out after showing initial interest, and at the end of 2014 the Society had yet to appoint an editor.

Given the potential implementation of INFORMS CAP, discussions around the Society awarding Chartered Scientist status through its membership of the Science Council have been put on hold.

Early-career O.R. workers form a key group for the Society, as well demonstrated by the success of the Young OR Conference. The Board agreed that more should be done to increase the input from and profile of this demographic within the Society. Following on from discussions at the Young OR conference in 2013, Stewart Robinson chaired a meeting of early career OR workers at the Society's offices in September. Alex Sheen now leads the Early Career Advisory Group and having joined the Board, can now ensure those views are heard at the highest level.

The Pro Bono O.R. initiative continued its success. Since its inception, Pro Bono O.R. has completed 28 projects and is currently working on 15 projects. Organisations have varied from tiny local organisations to large national organisations. Over 200 volunteers have been recruited and over 50 of those have either worked or are currently working on projects. Feedback from both volunteers and organisations has been overwhelmingly positive and this had led to the continuation of the project into 2015 and beyond.

The Board continued to monitor progress on the charitable investment projects funded in 2012 and 2013. All these projects are now complete or nearing completion. Jo Smedley has put in place a communication plan to ensure maximum benefit is obtained from the projects.

The Board agreed to the setting-up of a new SIG on Behavioural O.R. to be led by Sally Brailsford (University of Southampton), Dave Buxton (Decision Lab) and Phil Jones (Dstl). A proposal to set-up a new SIG on Public Policy Design, which emerged from a charitable project on O.R. and public policy, was also agreed. Meanwhile, the Simulation and System Dynamics+ SIGs have merged and the new Simulation SIG is being led by Martin Kunc (Warwick) and Tom Monks (Southampton).

Geoff Royston continued to lead developments on O.R. and Design. A successful meeting was held with the Design Society in February. Follow-on activities are expected in 2015.

Vice-President Sanja Petrovic's proposal that the Society should host debates on themes of wide interest led to the first such debate at the annual conference in September on the theme of 'optimisation vs. satisficing'. Sanja Petrovic also put forward a proposal to set-up an 'Impact' medal. This would recognise academic research that had demonstrable impact, much in line with the approach used in the Research Excellence Framework (REF). Given the number of O.R. oriented impact case studies for REF, this would provide a showcase for O.R. research. The Education and Research Committee are considering how the award might be implemented.

Other Board activities included:

- A proposal to move the Society's library from Brunel University to the Society's offices in Birmingham was discussed, but put on hold while attempts are made to re-rent the office space that would be used for the library.
- The O.R. in Schools project was reviewed, resulting in continued support for this initiative.
- In order to develop closer links between the OR Society and other O.R. bodies, reports on the Heads of O.R. Forum (HORF) and Committee of Professors in O.R. (COPIOR) are now standing items on the Board agenda.
- The Board agreed that a membership salary survey should be run in the autumn of 2014.
- Representations were made to the panel considering reforms to A-Level mathematics, especially over the concern that it would impact on the numbers studying the subject at A-Level.
- A potential bid to run the IFORS 2020 conference in the UK was considered, but it was decided not to make a bid on this occasion.

There were some changes in office personnel during 2014. Louise Allison took-up the post of Strategic Projects Manager, leaving her previous role as Education Officer vacant. Charlene Timewell was recruited as the new Education Officer. Following a successful first year of the Pro Bono Initiative, the Board appointed Felicity McLeister to the position of O.R. Pro Bono Project Manager on a continuing basis. Navin Mair was offered a full-time, permanent contract as IT Project Manager, balanced by a reduced need to use the services of the IT services supplier, Omnix.

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.

Events

The Events Committee has overseen 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.

2014 saw a full conference programme with two conferences and three one day events, including the Annual Conference (OR56), held at Royal Holloway University of London, and the biennial Simulation Workshop (SW14), held at the Abbey Hotel, Redditch. Between them the SW14 and OR56 conferences attracted 351 participants. As is our tradition and in the spirit of continuous improvement, the lessons identified from each conference are reflected upon and passed on to those organising future conferences. In 2015 we have the biennial Young OR conference (YOR19) at Aston University. The Society was successful in bidding to host the annual EURO conference which will take place at Strathclyde University, Glasgow and will incorporate the Society's main Annual Conference OR57. In addition to these conferences, a further four one-day events will be held, for which planning is well under way.

In April 2014, we held a very successful Analytics event which attracted 176 delegates. Given its success, this has now become an annual event, branded as The Annual Analytics Summit (TAAS) with the 2015 event scheduled for April. 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 180 students to a new more spacious venue at Millennium Point in Birmingham. The annual Blackett Memorial Lecture continues to attract a full audience: this year we exceeded the capacity of the Royal Society and so instead welcomed 180 attendees to a larger venue at Grocers' Hall, London. During 2014 we launched a new high profile event linked to the Beale Medal with presentations from the 2012 Beale Medal winner (Mark Elder) and the winner of the 2011 Doctoral Award (Richard Wood). The event was very successful, attracting some 84 delegates. We plan to make this an annual event to add to our programme, with the 2015 event held in Manchester in February 2015, with the same pattern of speakers.

A joint event between the OR Society and the British Academy of Management on Developments in Scenario Planning proved very successful and planning for a repeat next year is under way. Meanwhile, the charitable project Shaping Choices in Public Policy ran two events, the culmination of which was the formation of the Public Policy Design Special Interest Group and their first meeting.

We have continued to deliver a high-quality training programme. During 2014 we delivered seven open courses covering a range of O.R. topics which attracted 39 delegates of whom seven were non-members.

In addition, three bespoke in-house courses ran attracting some 43 delegates. 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; 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 tuition and support.

Publicity, Membership and Website

The Publicity, Membership and Website (PMW) committee has two main goals in the medium term: (i) a high profile for O.R. and the OR Society amongst the analytical and analysis-user communities; and (ii) membership growth.

In the last year PMW has driven two key steps in pursuit of these goals, described elsewhere in this report:

- Recruitment of a Strategic Projects Manager, whose work initially focuses on promoting the O.R. link with analytics, and increasing membership through better retention of existing members
- Introduction of free membership for students

Achievements in promoting 'profile' included:

- Growth in our LinkedIn, Twitter and Facebook communities (2984 members, 1181 followers and 422 friends respectively) with active discussions on all three
- Syndicated blogs around the Science of Better website, with an average of 403 visits per month to the site
- A video for the Daily Telegraph Business Club

This is in addition to continuing work from staff and other committees, alongside members, the Heads of O.R. Forum, COPIOR, the Council for Mathematical Sciences and Science Council and their members, the Pro Bono O.R. and O.R. in Schools initiatives, to raise awareness of the variety of activities undertaken by the Society and the value and effectiveness of O.R.

Member numbers increased from 2315 to 2718 over the year, mostly as a result of the introduction of free student membership and another PMW initiative, of free membership for non-members attending the annual conference.

Improvements to the Society's engagement and communication activity, highlighted as a priority last year, began towards the end of the year with the recruitment of the Strategic Projects Manager. A further survey, this time of new paying members, indicated that the most common reason for joining was not the hard financial benefits of cheaper access to material, but the desire to become part of the O.R. community. This is a heartening result, given the Society's primary positioning as a charity for the public benefit, rather than an organisation solely for the benefit of members; and continuing work on retention of existing members will take this into account.

PMW is also beginning to consider a less tangible, harder-to-measure goal of 'outreach', loosely covering all the people who are aware of, learn from, benefit from or advocate to others the work of the Society. 'Outreach' is driven by almost everything that the Society does; it is not only a key measure of how well we achieve our charitable objectives, but also of the number of people we can call on to continue to promote different parts of our activities. We expect to be paying more attention to this over the coming year.

2015 will be an exciting year for PMW, as the first full year of employment of the Strategic Projects Manager; the year in which the UK hosts EURO2015, the biggest conference of O.R. and analytics people in Europe with over 2000 participants; and the year of launch of the Society's new magazine *Impact*. PMW will be hoping to capitalise on all of these to ensure that the OR Society, the O.R. community and users of O.R. get lasting benefit.

Publications

The Society's journals enjoyed another successful year, with all Palgrave-published journals producing an increase in revenue compared with 2013. With the profit share percentage allocated to the Society now reaching its final level (75%), the income to the Society in 2014 was £693k, representing an 18% increase on the 2013 figure. With the inclusion of editorial stipends paid by Palgrave to the Society, total income for the Society (from Palgrave) for 2014 was £748k, up 16.6% from 2013. 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 2015 indicates an increase in subscriptions of 7% in site licences and 6% in print licences, but these increases are allied to a 7% increase in pagination. All journals now offer the hybrid "author pays" Open Access option, but there has not been a significant number of submissions through this route.

Looking forward to 2015, a new glossy magazine entitled *Impact* will be published, with the first issue scheduled for March 2015. As the title suggests, the aim of the magazine is to bring to prominence articles which demonstrate the impact which O.R. has had on a variety of business, industrial, government, etc. initiatives. The content of the magazine will be aimed mainly at OR Society members, but the magazine will also have a role as an outreach publication. Material for the magazine is sourced partly from other published articles, which are sometimes rewritten in a style more suitable for those without specialised knowledge in that subject area. We are deeply indebted to Graham Rand, Editorin-Chief of *Impact*, for his Herculean efforts in bringing the magazine to fruition in such a short time-scale.

A new book series in O.R. was introduced in 2014, with a series title *O.R. Essentials*. This is designed to 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 who has championed this initiative and has agreed to take on the duties of editor-in-chief. Two books are already in print: *Agent-based Modelling and Simulation*, and *O.R., Defence and Security*, with several more books in the pipeline.

Discussions on the possible introduction of a journal on Analytics have continued throughout 2014, but it has not been possible as yet to find a suitable candidate for the post of editor-in-chief.

Guy Edwards, Senior Publishing Editor at Palgrave, tendered his resignation at the turn of 2014; his role was taken over in early 2015 by Amy Shackleton. The Committee thanks Guy for his contribution over the last year and wishes him well in the next stage of his career. Publications Committee welcomes Christine Currie as the new Editor-in-Chief of Journal of Simulation, and extends its thanks to all editors, and to Sarah Parry in the OR Society office, for their efforts and commitment in 2014.

Education and Research

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

The O.R. in Schools (ORiS) Task Force, chaired by Vince Knight with Louise Allison (now replaced by Charlene Timewell) based at the OR Society, continued its work in promoting O.R. to school-aged audiences. New case studies have been identified and new content has been added to the website. Events have been held which aim to raise the profile of O.R. among maths teachers. A strategic review of ORIS was performed in October 2014.

The Annual Careers Day, led by Vince Knight and Louise Allison, returned to Birmingham in November 2014. 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.

Research in O.R. continued to be an important focus of the committee. The annual Doctoral Award for the best Ph.D. in O.R. was overseen by the Awards Panel with members drawn from across the Society. Nine submissions were received with the winner and runners-up announced in November 2014 (presentation at Beale Lecture in Manchester in February 2015).

The EPSRC-funded NATCOR initiative (Bo Chen) 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 OR professionals. ESRC engagement (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 2014 through Special Interest Groups (SIGs) with an ERC member (Noel Corrigan) as the Society's SIG representative. Work in 2014 has focused on identifying dormant groups and progressing closure where appropriate as well as supporting emerging SIG proposals. Noel has prepared a document to discuss the activity of SIGs and the way forward. Additionally, work on Regional Societies has been carried out and a proposition has been made to the Board to establish best practice for their operation. While, collectively, SIGs provide an important way of enhancing services to members through the development of communities of

practice on various O.R. topics, a proposal to transfer this activity to another committee will be discussed at ERC before presentation at the Board.

Jo Smedley linked with the Higher Education Academy (HEA) on O.R. developments as well as continuing as an Academy Associate in O.R. Jo produced an article in *Inside OR* about her activities.

In overseeing the OR Society Library (Mike Wright), the Committee reviewed and maintained a stock of books, journals and archive materials offering a unique insight into historical aspects of OR 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). While a move to the OR Society offices has been discussed, new uses of the space may prevent moving the library. 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 2014, ERC continued to lead the development and implementation of the 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. Three projects that were successful in the second round of bidding finished in 2014:

- "The Future Policy Influence of O.R.", John Friend, £5,000.
- "Mapping and Analysis of Knowledge Exchange Funding sources of OR Society 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.

Since 2012, this initiative has provided an agile mechanism enabling the Society to respond quickly to new real-world developments through outcomes from recent project work on various hard and soft O.R. topics. A communications plan has been put in place to disseminate the findings from these projects.

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.

- Goodeve Medal (awarded for best paper published in *JORS* in 2013): Awarded to Jens Bengtsson, David Bredström, Patrik Flisberg and Mikael Rönnqvist "Robust planning of blending activities at refineries" Journal of the Operational Research Society (2013) 64, 848– 863.
- Stafford Beer Medal (awarded for best paper published in EJIS in 2013): Awarded to Elmar Kutsch, David Denyer, Mark Hall and Liz Lee-Kelley "Does risk matter? Disengagement from risk management practices in information systems projects", European Journal of Information Systems, 22 637-649.
- **Cook Medal** (awarded for best paper published in *KMRP* in 2012/2013): Awarded to Paul Jackson and Jane Klobas "Deciding to use an enterprise wiki: the role of social institutions and scripts", Knowledge Management Research & Practice, 11 323-333.
- President's Medal (awarded for the best practical application of O.R): Awarded to David Lane, Eileen Munro and Elke Husemann for "Using Systems Thinking to Undertake a Review of Child Protection in England."

- PhD Prize (awarded for the most distinguished body of research leading to the award of a
 doctorate in the field of OR in 2013): Awarded to T Lidbetter, London School of Economics.
- Beale Medal (awarded for a sustained contribution to the theory, practice, or philosophy of OR): Awarded to Robert Fildes.
- **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): Awarded to Clive Humby and Ruth Davies.

Finance

Structure of the accounts

The Society's funds are organized 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.

Review of operations

The Society's overall income and expenditure account showed a surplus of £82k during the year, on a turnover of just over £1m. This compares with an essentially break-even outcome in 2013. The 2014 outturn was significantly ahead of budget as a result of a larger than expected contribution from the Society's academic journals; this in turn was largely the result of unexpected 'backfile' purchases of journal archives by institutions.

Most operations to support the charitable aims of the Society - such as conferences, special events, training, regional societies, special interest groups, education, publicity and outreach 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 income from its academic journals - particularly the latter which in 2014 contributed £656k compared with £542k in 2013 (these figures are net of all associated costs). This serves as a reminder of the Society's current financial dependence on the academic publication system; see the section on 'Risk' below.

On the whole, the pattern of expenditure was little different from that in 2013. A notable exception was a 30% increase in net website costs, although these are likely to moderate somewhat in subsequent

years as we change the balance between in-house and contracted effort in this area. Within the category of 'Non-revenue earnings in pursuit of charitable aims', reduced expenditure on public information went a long way to offset increased resources devoted to the Third Sector Pro Bono initiative and other strategic initiatives such as that aimed at raising the Society's profile in the field of Analytics.

At year end, the Society employed 12 members of staff (10.5 full-time-equivalents), compared with 11 at the end of 2013. The increase reflects the creation of the new post of Strategic Projects Manager.

Assets, reserves and investments

The total net assets of the Society increased from £2.18m to £2.25m over the year, with the surplus on income and expenditure being slightly offset by a net £15k capital loss (realised and unrealised) on our investment fund - the notably buoyant stock market conditions from which the Society benefited so greatly in 2013 were not repeated in 2014.

It is important that the Society maintains an appropriate level of reserves in relation to perceived financial risks. Currently, the judgement of the Board is that the total cash, stocks and shares element of its two reserve funds need not exceed one year's total expenditure, even taking account of the possibility of a fall-back from current stock market valuations. This policy allows about £250k 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 utilisation of such funds is the subject of current Board deliberations.

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 (Investec).

Risk

The Society's dependency on journal income is the most significant material risk. Developments, both in the UK and abroad, that mandate 'open access' publishing for publicly funded work, pose the greatest potential threat to this income stream, although the current perception is that any adverse financial impact will manifest itself over a somewhat longer timescale than was previously feared. The risk of a temporary interruption in the income stream owing to administrative or commercial problems affecting the publication and revenue-capture process is also recognised, and is a strong influence on decisions about the appropriate level of the Society's reserves.

Voluntary Contributions

The Society's work in 2014 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 2014 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 and Roger Forder.

Signed on behalf of Board

Stewart Robinson, President

Roger Forder, Hon Treasurer

Accounts

for the year ended 31st December 2014

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 2014 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 2014 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 2014

		L	Inrestricted Fun	ds	<u>2014</u> £	<u>2013</u> £
				Designated		
	<u>Note</u>	General <u>Fund</u>	Reserve <u>Funds</u>	Award <u>Fund</u>	Total <u>Funds</u>	Total <u>Funds</u>
INCOMING RESOURCES						
Charitable activities :						
Subscriptions		140,452	_	_	140,452	145,187
Events and Conferences		138,346	_	-	138,346	160,997
Training		43,483	-	-	43,483	52,015
Publications	2	759,047	-	-	759,047	655,475
Accreditation		7,096	-	-	7,096	7,162
World Wide Web and Internet		9,442	-	-	9,442	5,457
Miscellaneous Sales		809	-	-	809	761
		1,098,675	-	-	1,098,675	1,027,054
Rental Income		-	-	-	0	0
Investment Income	6	-	42,424	1,776	44,200	44,693
Total Incoming Resources		1,098,675	42,424	1,776	1,142,875	1,071,747
RESOURCES USED						
Investment Management Costs			9,628		9,628	9,677
invesiment Management Costs		-	9,020	-	9,020	9,077
Direct charitable expenditure :						
Subscriptions		92,166	1,069	-	93,235	101,640
Events and Conferences		185,511	735	-	186,246	210,745
Training		69,290	195	-	69,485	61,754
Publications	2	212,506	849	-	213,355	229,893
Accreditation		5,753	38	-	5,791	4,890
World Wide Web and Internet		151,601	1,437	-	153,038	116,139
Miscellaneous Sales		540	6	-	546	720
Other Charitable Expenditure	3	246,186	1,328	1,605	249,119	238,430
		963,553	5,657	1,605	970,815	964,211
Governance Costs	4	77,677	2,572	-	80,249	94,563
Total Resources Used	5	1,041,230	17,857	1,605	1,060,692	1,068,451
NET INCOMING / (OUTGOING)						
RESOURCES BEFORE TRANSFERS		57,445	24,567	171	82,183	3,296
Transfers between Funds		34,400	(34,400)	-	-	-
NET INCOMING / (OUTGOING) RESOURCES FOR THE YEAR		91,845	(9,833)	171	82,183	3,296
carried forward		91,845	(9,833)	171	82,183	3,296

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2014 (continued)

	Unrestricted Funds					2013 £
	<u>Note</u>	General <u>Fund</u>	Reserve <u>Funds</u>	Designated Award <u>Fund</u>	Total <u>Funds</u>	Total <u>Funds</u>
brought forward		91,845	(9,833)	171	82,183	3,296
Realised Gains/(Losses) on Sale of Investments	14	-	6,557	-	6,557	15,756
NET INCOME / (NET RESOURCES USED) FOR THE FINANCIAL YEAR	<u>-</u>	91,845	(3,276)	171	88,740	19,052
Other Recognised Gains and Losses Unrealised Gains/(Losses) on Investments in the year	: 13	-	(22,552)	1,136	(21,416)	149,047
NET MOVEMENT IN FUNDS	_	91,845	(25,828)	1,307	67,324	168,099
Balances brought forward 1 January 2014		661,918	1,467,777	54,942	2,184,637	2,016,538
BALANCES CARRIED FORWARD 31 DECEMBER 2014	_	753,763	1,441,949	56,249	2,251,961	2,184,637

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 , £88,740 (2013 - £19,052) 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 2014

	<u>Note</u>		2014 £		2013 £
FIXED ASSETS					
Tangible Fixed Assets Investments:	7		276,458		301,355
Listed at Market Value Cash Deposited with Investment Brokers	8		1,253,252 8,811		1,264,538 17,153
Charities Aid Foundation	9		63,454		60,542
			1,601,975	·	1,643,588
CURRENT ASSETS					
Debtors Cash at Bank and In Hand	10		761,436 (3,040)		628,029 4,994
			758,396		633,023
CREDITORS (amounts falling due within one year)	11		108,410		91,974
NET CURRENT ASSETS			649,986		541,049
TOTAL ASSETS LESS CURRENT LIABILITIES			2,251,961	:	2,184,637
FUNDS					
General Fund Reserve Funds :			753,763		661,918
Designated Reserve Fund Journal Risks Special Reserve Fund	12(1) 12(2)	939,098 502,851	_ 	957,124 510,653	1,467,777
Designated Award Fund	12(3)		56,249		54,942
TOTAL FUNDS			2,251,961		2,184,637
*****************	******	*****	******	*****	*****

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 20 May 2015 and signed on its behalf:

R. A. FORDER

Honorary Treasurer

S L ROBINSON

President

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2014

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.

(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 2014.(2013 - £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:

	0	•	9	
Long leaseh	old building		-	2%
Office mach	ines and comp	outer equipment	-	25%
Fixtures and	l fittings		-	10%
Software sys	stems		-	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 2014 (continued)

2	PUBLICATIONS	<u>2014</u> £	2013 £
	Incoming resources: Journal / KMRP / JOS Inside OR EJIS / Health Systems Other Publications	538,156 9,422 209,964 1,505 759,047	465,005 9,998 177,606 2,866 655,475
	Resources used: Journal / KMRP / JOS Inside OR EJIS / Health Systems Impact Magazine Other Publications	63,041 112,086 28,615 5,548 4,065 213,355	69,783 121,488 31,196 - 7,426 229,893
3	OTHER DIRECT CHARITABLE EXPENDITURE		
	Charitable projects Fitness of OR in Universities Piloting Blended Learning The Future Policy Influence of OR Training to Practice or Training to Research? Mapping and Analysis of Research Funding OR - Impact in Developing Countries OR - Ambassadors in Schools	10,280 3,078 5,867 9,097 6,196 - - 34,518	10,980 3,137 1,294 4,636 - 5,543 3,367 28,957
	Non-revenue earning activities in pursuit of charitable aims IAOR Online - Members access Library Foreign Affairs Expenses Regional Societies Special Interest Groups Public Information about OR: Science of Better Learn about OR General Publicity Third Sector Pro Bono Sponsorship of OR Conferences Medals, Awards and Scholarships Strategic Initiatives Other Costs	6,642 5,000 7,695 3,741 5,503 18,091 50,591 44,651 22,884 5,000 6,522 38,281	5,750 9,254 6,312 2,718 3,017 23,771 64,564 53,634 8,484 - 4,959 27,010 - 209,473
	Total	249,119	238,430
4	GOVERNANCE COSTS Board and Committees Auditors' Fees: for audit for other services	67,494 6,350	82,696 6,250
	Other Legal and Professional Fees	6,405 80,249	5,617 94,563

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2014 (continued)

5 TOTAL RESOURCES EXPENDED

Expenditure analysed by type of cost:

	Staff Costs £	Other Costs £	Depreciation £	Total <u>2014</u> £	Total <u>2013</u> £
Investment Management Costs	-	9,628	-	9,628	9,677
Subscriptions	67,136	23,423	2,676	93,235	101,640
Events and Conferences	46,205	137,800	2,241	186,246	210,745
Training	12,242	56,755	488	69,485	61,754
Publications	53,314	157,916	2,125	213,355	229,893
Accreditation	2,369	1,028	2,394	5,791	4,890
World Wide Web & Internet	90,436	13,621	48,981	153,038	116,139
Miscellaneous Sales	395	135	16	546	720
Other Charitable Expenditure	83,328	156,379	9,412	249,119	238,430
Governance Costs	39,492	39,183	1,574	80,249	94,563
	394,917	595,868	69,907	1,060,692	1,068,451
Staff costs :					
Wages and Salaries				324,883	313,547
Social Security Costs				32,783	32,096
Pension Costs				37,251	33,680
			- -	394,917	379,323
			-		

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

	<u>2014</u>	<u>2013</u>
Charitable activities	7.5	7.0
Management and administration	2.5	2.0
	10.0	9.0

During this and the previous year one employee of the Society earned between £70,000 and £80,000, excluding pension contributions.

No remuneration was paid or is payable to Trustees for service on the Board for the year (2013 - £Nil).

During the year 9 Trustees (2013 - 9 Trustees) received a total of £ 7,047 (2013 - £7,147) in reimbursement of expenses incurred on Society business . Prof S L Robinson received £1,128 (2013 - £1,332) and Ms F O'Brien £741 (2013 - £792) for the supply of training courses to the Society during the year.

Other external costs include :	<u>2014</u> £	<u>2013</u> £
Other Operating Leases	5,915	5,915

At 31 December 2013

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2014 (continued)

Income from Listed Investments 42,374 42,441 Interest on Bank Deposits 50 68 Distributions - CAF 1,776 2,184	6	INTEREST RECEIVABLE AND SI	MILAR INC	ОМЕ			
Interest on Bank Deposits Distributions - CAF						· · · · · · · · · · · · · · · · · · ·	<u>2013</u> £
Tangible Assets							42,441
TANGIBLE ASSETS Long Leasehold Land and Office Fixtures Software Systems Total Equipment Equi							2,184
Long Leasehold Land and Office Fixtures Software Buildings Equipment £ £ £ £ £ £ £ Cost At 31 December 2013 314,306 113,955 42,297 696,375 1,166,933 Additions - 610 - 44,400 45,010 Disposals At 31 December 2014 314,306 114,565 42,297 740,775 1,211,943 Depreciation At 31 December 2013 125,720 90,115 40,465 609,278 865,578 Charge for the Year 6,286 8,624 832 54,165 69,907 Disposals At 31 December 2014 132,006 98,739 41,297 663,443 935,485 Net Book Value					-	44,200	44,693
Long Leasehold Land and Office Fixtures Software Buildings Equipment £ £ £ £ £ £ £ Cost At 31 December 2013 314,306 113,955 42,297 696,375 1,166,933 Additions - 610 - 44,400 45,010 Disposals At 31 December 2014 314,306 114,565 42,297 740,775 1,211,943 Depreciation At 31 December 2013 125,720 90,115 40,465 609,278 865,578 Charge for the Year 6,286 8,624 832 54,165 69,907 Disposals At 31 December 2014 132,006 98,739 41,297 663,443 935,485 Net Book Value					_		
Leasehold Land and Buildings Equipment £ Equipment £ Equipment £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £ £	7	TANGIBLE ASSETS					
Cost Buildings £ £ Equipment £ £ & Fittings £ £ Systems £ £ Total £ £ At 31 December 2013 Additions Additions Disposals 314,306 113,955 42,297 696,375 1,166,933 44,400 45,010 - 44,400 45,010 - 44,400 45,010			Leasehold	Office	Fixtures	Software	
Cost At 31 December 2013 314,306 113,955 42,297 696,375 1,166,933 Additions - 610 - 44,400 45,010 Disposals					_	Systems	Total
Additions Disposals - 610 - 44,400 45,010		Cost	2	~	2	2	۷
Disposals			314,306		42,297		1,166,933
Depreciation At 31 December 2013 125,720 90,115 40,465 609,278 865,578 Charge for the Year 6,286 8,624 832 54,165 69,907 Disposals - - - - - At 31 December 2014 132,006 98,739 41,297 663,443 935,485 Net Book Value			-	610	-	44,400	45,010
At 31 December 2013 125,720 90,115 40,465 609,278 865,578 Charge for the Year 6,286 8,624 832 54,165 69,907 Disposals		At 31 December 2014	314,306	114,565	42,297	740,775	1,211,943
Charge for the Year 6,286 8,624 832 54,165 69,907 Disposals - - - - - At 31 December 2014 132,006 98,739 41,297 663,443 935,485 Net Book Value		Depreciation					
Disposals					•		865,578
Net Book Value			6,286	8,624 -	832	54,165 -	69,907
		At 31 December 2014	132,006	98,739	41,297	663,443	935,485
At 31 December 2014 <u>182,300 15,826 1,000 77,332</u> <u>276,458</u>		Net Book Value					
		At 31 December 2014	182,300	15,826	1,000	77,332	276,458

Capital expenditure authorised but not contracted for at 31 December 2014 and not provided for in the accounts amounted to £Nil (2013 - £Nil).

23,840

1,832

87,097

301,355

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.

188,586

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 2014 (continued)

8 LISTED INVESTMENTS AT MARKET VALUE

	<u>2014</u> £	<u>2013</u> £
Market Value at 1st January 2014	1,264,538	1,092,813
Additions at Cost	159,608	140,983
Proceeds on Disposal	(154,899)	(135,487)
Net Investment Gain /(Loss)	(15,995)	166,229
Market Value at 31st December 2014	1,253,252	1,264,538
Cost	987,737	943,761
Representing :-		
Designated Reserve Fund Designated Journal Risks Special Reserve Fund	752,954 500,298 1,253,252	759,734 504,804 1,264,538

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 Investec.

9 CHARITIES AID FOUNDATION

At 31 December 2014 this investment is represented by 56,058 (2013 - 56,058) shares in the IM CAF Fixed Interest B Accumulation Fund, having a market value of £63,454 (2013 - £60,542).

Market Value at 1st January 2014	2 <u>014</u> £ 60,542	2013 £ 59,783
Net Investment Gain /(Loss) Distributions not remitted	1,136 1,776 2,912	759
Market Value at 31st December 2014	63,454	60,542
Cost	56,060	56,060

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2014 (continued)

10 DEBTORS

	DEBTORG			
		<u>2014</u>		<u>2013</u>
		£		£
	Trade Debtors	8,241		5,474
	Taxation Recoverable	14,414		20,542
	Prepayments	46,203		14,139
	Accrued Income	692,578		587,874
		761,436	-	628,029
		701,430	=	020,029
11	CREDITORS			
		<u>2014</u>		<u>2013</u>
		£		£
	Trade Creditors	38,314		16,704
	Taxation and Social Security	-		5,632
	Accruals	38,166		24,846
	Deferred Income	31,930		44,792
		108,410	- -	91,974
	Deferred income brought forward		44,792	
	Released to incoming resources during the year		(44,792)	
	Deferred income arising in the year	_	31,930	

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:

31,930

(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

Deferred income carried forward

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".

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2014 (continued)

13	3 ANALYSIS OF NET ASSETS BETWEEN FUNDS			Journal Risks		
		General <u>Fund</u> £	Designated Reserve <u>Fund</u> £	Special Reserve <u>Fund</u>	Designated Award <u>Fund</u> £	<u>Total</u> £
		2	2	2	~	2
	Tangible Fixed Assets Investments Cash Deposited with Investment	94,158	182,300 752,954	500,298	- 63,454	276,458 1,316,706
	Brokers	-	5,294	3,517	-	8,811
	Net Current Assets/Liabilities	659,605	(1,450)	(964)	(7,205)	649,986
	Total Net Assets	753,763	939,098	502,851	56,249	2,251,961
	Reconciliation of movements in unrealised gains/(losses) on investment assets :			Reserve <u>Funds</u>	Designated Award <u>Fund</u> £	<u>Total</u> £
	Unrealised gains at 31 Dec 2013 Realised investment (gains) /			320,773	41	320,814
	losses during the year Net unrealised investment gains/			(32,707)	-	(32,707)
	(losses) arising during the year			(22,552)	1,136	(21,416)
	Unrealised (losses)/gains included		<u>-</u>			
	in net assets at 31 Dec 2013		=	265,514	1,177	266,691
14	DISPOSAL OF INVESTMENTS				Book Gain/(Loss)	Realised
			Cost £	Proceeds £	on Disposal £	Gain/(loss)
	Reserve Funds	<u>-</u>	115,635	154,899	6,557	(32,707)

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 £37,251 (2013 - £33,680).

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
Professor S L Robinson	2014/15

OR Society awards

Companion of Operational Research

Sir Hermann Bondi	1983	Professor D J White	2001
Mr D Hicks	1983	Professor K C Bowen	2001
Professor R V Jones	1983	Dr R A Forder	2005
Professor B H P Rivett	1983	Professor F Kelly	2005
Mr H R W Watkins	1984	Mr G K Rand	2005
Professor Sir David Cox	1985	Dr J C Ranyard	2005
Lord Ezra	1985	Professor J V Rosenhead	2005
Mr P Hughes	1985	Dr J F Miles	2006
Lord Zuckerman	1985	Professor R G Dyson	2007
Sir John Kingman	1986	Mr E K G James	2007
Sir Dennis Rooke	1986	Professor J Friend	2008
Sir Charles Carter	1987	Dr G Royston	2008
Mr T P Frost	1987	Professor R J Paul	2009
Professor H.Muller-Merbach	1988	Professor A Mercer	2010
Mr D A Quarmby	1989	Mr T O'Connor	2010
Professor R C Tomlinson	1990	Professor V Belton	2011
Mr R A Showell	1991	Ms R A Kaufman	2011
Mr G H Mitchell	1992	Professor M Pidd	2011
Professor P Whittle	1994	Professor P H Millard	2012
Mr J Plymen	1994	Professor D M Ryan	2013
Professor S Vajda	1995	Professor R M Davies	2014
Professor K B Haley	1996	Mr C R Humby	2014
Professor M F Shutler	1996		

Goodeve Medal

B H Mahon	1976	P Kloprogge	2001
R J M Bailey	1976	R Dekker	2001
N R Tobin	1977	S Howick	2002
I Sanderson	1979	C Eden	2002
A J Williams	1980	J E Beasley	2003
J G Shepherd	1981	H Howells	2003
F K Lyness	1982	J Sonander	2003
L P Fatti	1984	R Hartley	2004
A H Christer	1985	G Lanot	2004
W M Waller	1985	S C Brailsford	2005
G Best	1987	V Lattimer	2005
G Parston	1987	P Tarnaras	2005
J V Rosenhead	1987	J Turnbull	2005
D Rowland	1988	K Taylor	2006
I R Turner	1989	B Dangerfield	2006
R Bandyopadhay	1990	S C Brailsford	2007
S Datta	1990	D Evenden	2007
D Schrady	1992	V Harinda	2007
D Wadsworth	1992	P Harper	2007
A Bouzaher	1993	A Medina-Borja	2008
S Offutt	1993	K S Pasupathy	2008
D W Bunn	1994	K Triantis	2008
E R Larsen	1994	D Ronen	2009
K Vlahos	1994	C A Goodhart	2009
G M Campbell	1995	S Kumar	2010
C F Davis	1995	D A Nottestad	2010
M Carey	1996	E E Murphy	2010
D Lockwood	1996	L C Thomas	2011
C M Yeats	1997	F R Johnston	2012
T Rehman	1997	E A Shale	2012
D-W Tcha	1998	S Kapoor	2012
T-J Choi	1998	A Sheth	2012
Y-S Myung	1998	R True	2012
F Duckworth	1999	P Kemmer	2013
A J Lewis	1999	A Strauss	2013
J Banasik	2000	T Winter	2013
J N Crook	2000	J Bengtsson	2014
L C Thomas	2000	D Bredstrom	2014
K Korporaal	2001	P Flisberg	2014
A Ridder	2001	M Ronnqvist	2014

Stafford Beer Medal

JJ Jahng	2003	J Peppard	2009
H Jain	2003	F Thiesse	2010
K Ramamurthy	2003	J Al-Kassab	2010
R Lindgren	2004	E Fleisch	2010
D Stenmark	2004	P O'Reilly	2011
J Ljungberg	2004	P Flanegan	2011
S Sarker	2005	R Lederman	2012
S Sahay	2005	R Johnston	2012
S Madon	2006	H Koch	2013
C Middleton	2007	E Gonzalez	2013
W Cukier	2007	D Leidner	2013
S K Sia	2008	D Denyer	2014
C Soh	2008	M Hall	2014
C Ashurst	2009	E Kutsch	2014
N Doherty	2009	E Lee-Kelley	2014

Tocher Medal

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

Cook Medal

P Jackson	2012/12	J Klobas	2012/12
r Jackson	2012/13	1 VIONAS	2012/13

PhD Prize

K Kaparis	2008	R Wood	2011
A Strauss	2009	K Rustogi	2012
F Liberatore	2010	T Lidbetter	2013

President's Medal

	J J		
D R Corkindale	1976	H Gilles	2000
M L Chambers	1977	D Bright	2000
R G Dyson	1977	V Kocatulum	2000
M Sloman	1978	E Wolf	2000
J V Rosenhead	1979	J Moffat	2000
P Doyle	1980	J J Race	2001
J Fenwick	1980	D Burnell	2001
G P Savage	1980	M Neighbour	2002
D B Gilding	1981	M Acutt	2003
C Lock	1981	P Loader	2004
B Fokkens	1982	M Bryant	2004
M Puylaert	1982	P Bates	2004
R S Hambleton	1983	C McGuckin	2004
A W Nimmo	1984	D Kelly	2004
C B Chapman	1985	P Loucopoulos	2005
D F Cooper	1985	KG Zagrafos	2005
A B Cammaert	1985	Y Pyrgiotis	2005
P Doyle	1987	D Beis	2005
J Saunders	1987	A Swain	2006
M Pidd	1988	A Ross	2006
S R Clarke	1989	A Lewins	2007
A H Christer	1990	M Sykes	2007
K A H Kobbacy	1990	A Moon	2007
B C Dangerfield	1991	M Allwright	2008
C A Roberts	1991	J Ball	2008
M B Wright	1992	D Pankhurst	2008
C P Thunhurst	1993	I Wright	2008
C J Ritchie	1993	P Frangos	2010
A Khakee	1994	S Hughes	2010
K Stromberg	1994	S Hammond	2011
J J Glen	1996	K Slater	2011
H Tsoukas	1997	C Marston	2012
D B Papoulias	1997	P Rose	2012
J H Powell	1998	S Mardle	2013
G Laporte	1999	L Fildes	2013
F Semet	1999	A Lewins	2013
V V Dadeshidze	1999	E Husemann	2014
L J Olsson	1999	D Lane	2014
F Vasko	2000	E Munro	2014

Beale Medal

J V Rosenhead	1992	L C Thomas	2008
D J White	1993	J D Griffiths	2009
A H Christer	1995	K H Haley	2010
G H Mitchell	1998	F Kelly	2011
H P Williams	1999	M D Elder	2012
R C Tomlinson	2005	K D Glazebrook	2013
P Checkland	2006	R Fildes	2014
C Eden	2007		

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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