



THE
OPERATIONAL
RESEARCH
SOCIETY

Annual Report

for the year ended 31 December 2023

Operational Research Society

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Foreword from the President

It is a great pleasure to introduce this report, which describes The Operational Research Society's achievements during 2023 and sets out our future plans.

Our regular drumbeat of Governance meetings have continued to take place online, with a highlight being a trustees 'in person' meeting and away day in the autumn. Following leadership changes at the start of 2023 with a new President and Executive Director in post, we have embarked on some work to revisit the strategy that was set in 2019/20. Overarching priorities remained to project our Visibility, Value and Vibrancy as a Society with a particular focus on diversifying our income away from Publications. Continued volatility in the external environment presented continued challenges to Investment growth, but we saw a rebound in our Events attendance and activities following a difficult few years post pandemic, firstly being able to return to in-person activity and then encouraging members to participate, resume travel and attendance.

This report describes some of The OR Society's key achievements during 2023 in responding to the opportunities and challenges presented by the operating environment. These have included: developing the scope and reach of our in person and online delivery of services, building a new senior leadership team, responding to the decline in Publications income, achieving readiness to deliver the level 7 apprenticeship for an Operational Research Specialist as an End Point Assessment Awarding Body; and our continued contribution to both the Alliance for Data Science Professionals, the Council for Mathematical Sciences and development of the Academy for Mathematical Sciences.

2023 was an important year for the Society, not least because we celebrated 75 years of Operational Research in the UK. We commenced 12 months of activity to celebrate the past, present and future of Operational Research and the OR Society at our OR65 annual Conference at the University of Bath.

Later in this report I'll be listing some of the objectives for 2024. This will be a significant year for the Society as we continue our celebrations for our 75th anniversary. We'll be planning and delivering some significant projects to create the optimal foundation in which to grow and prosper in future years.

Gilbert Owusu
OR Society President 2023-2024
April 2024

Introduction

The Operational Research Society is a charity set up to advance knowledge, interest and education in operational research (OR). Our vision is of a world improved by rigorous analysis and better, evidence-based decision-making: “OR providing world class analysis for world class decisions”. In this world OR 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.

As a charity, we must work for the public benefit, but we also aim to work for the good of our members, because without active, able and well-supported researchers and practitioners, students and supporters, OR would not exist. We disseminate learning; promote awareness of OR; support OR professionals and standards; and aim to ensure that UK OR has a ‘voice at the table’, both in the international OR world and in wider UK arenas. This represents a broad programme of activities and services, that has been growing year on year and that we continue to maintain and develop.

With the continuing dramatic changes in the world around us our activities and services have had to adapt accordingly. These changes present great challenges for the whole world, but offer great opportunities for the OR discipline, OR professionals and The OR Society.

Review of the Year 2023

2023 was the fourth year of a 3 to 5-year strategic planning cycle. Due to the changing external environment (since the plan was created and launched in 2019/20) and recent leadership changes within the organisation (President and Executive Director) it was decided to revisit the strategy with a view to a strategy refresh and revised plan for the next 3 years. We worked with an external consultant to apply Viable System Modelling to our structures and processes, revisiting our main priorities and strategic pillars and creating an updated strategic plan for 2024 to 2026. During this review, we agreed that the strategic pillars and priorities for the Society remained fit for purpose. The strategic pillars are: raising awareness of the importance of OR; supporting OR knowledge development; supporting OR education; growing membership and wider reach; ensuring financial sustainability of the Society; and embedding good diversity practice in OR and the ORS. Whilst we aim to put EDI considerations at the heart of everything we do, we felt its importance deserves highlighting as a separate strategic strand. We also recognised the increasing importance of the Research element of our work by recognising the Research Cttee as a core sub cttee of the Board, with the Research Cttee Chair joining the Board of Trustees with effect from the end of 2023.

Highlights of the Year

This has been another year of highlights which, along with our full range of activities, support our charitable aims to advance knowledge, interest and education in OR.

Advancing knowledge

The Society’s portfolio of academic journals continued to make a substantial contribution to both advancing and sharing knowledge. The publishing landscape is evolving, and the move towards Open Access has meant our content has become more widely available through the increasing number of ‘read and publish’ deals that are being signed across the world. More than one million downloads of academic papers were made during the year.

Operational research apprenticeships took further steps towards becoming a serious route to training the analysts of the future, with the Society looking to establish itself at the heart of the quality assurance processes core to that route.

The Society continues to work with the Council for Mathematical Sciences on the next steps towards the establishment of the Academy for Mathematical Sciences. We supported the creation of the proto-Academy and are engaged across all levels of this work. This will play a key role in the future knowledge advancement

in OR. Other activities to advance knowledge are covered below in the Events, Publications and Research sections.

Advancing interest

The Society's strategic goal of advancing interest in OR returned to a more normal footing with the return of in-person events. The opportunity to expand its global reach through a complementary programme of online events was well received.

The Society continued to implement the recommendations of its Artificial Intelligence (AI) task and finish group, especially through its links to the work of the ValidateAI group (validateai.org). The Society continues to be at the heart of the Alliance for Data Science Professionals, establishing standards for both practitioners and degree courses. Other activities to advance interest are covered below in the Events, OR in Education and Pro Bono OR sections.

Advancing education

The Society reached application stage as an awarding body for the purposes of End Point Assessment. This is to deliver the assessment for the Level 7 OR specialist apprenticeship. Submission to Ofqual as an awarding body was achieved in 2023 with recognition expected in 2024. Other activities to advance education are covered below in the Education, Training and OR in Education sections.

Other highlights

Some of our 2023 highlights made contributions to all our charitable aims. These included the continuing growth of our Women in OR and Analytics Network (WORAN), both in terms of the number of participants and its activities during the year. We also continued our valuable charitable work through our Pro Bono OR projects.

Achievements during the year

Equity, Equity, Diversity & Inclusion

Nicola Morrill continued to act as the EDI Board Champion until October 2023. Steps were taken to identify a replacement Board Champion and a staff EDI Manager. As of 2024, Heather Tewkesbury assumed the role of EDI Board Champion and Eve Hardy the staff EDI Manager.

EDI pervaded much of our activity in 2023 with committees leading on EDI for their respective areas. The Publications committee have continued their review of gender across all editorial boards. As a result of work undertaken in 2023, EJIS is on target to achieve gender parity across both Editors-in-Chief and Associate Editors in 2024. The Editors-in-Chief for JoS and HS are evenly split between men and women, further work continues to increase the gender diversity of other editorial boards. The Publications Committee also centred EDI as part of their 75th anniversary celebrations, commissioning the WISDOM discussion paper, which is expected to be published in 2024.

The OR in Education Taskforce also put EDI at the heart of the celebrations and undertook significant work planning a 75th Anniversary celebration event at the National Memorial Arboretum. Students from disadvantaged schools will receive priority invitations to the 2024 event and ringfenced budget was requested to pay for travel bursaries for these schools to ensure that the event is as accessible as possible.

The Research Committee continued to liaise with UKRI and EPSRC on EDI topics and promoted the implementation of their new handbook on EDI best practice. The Research Committee also participated in a consultation led by EPSRC on neurodiversity in the Mathematical Sciences. They are looking forward to implementing any recommendations that result from the consultation.

In Pro Bono OR, we have supported a number of charities which help disadvantaged communities, including BLAST Fest, which is a charity that encourages people from Black and Ethnic Minority communities to engage

with STEM, and wrapped up a project for the Brandon Trust, which focussed on supporting their implementation of their EDI strategy. Pro Bono OR has also attracted a diverse range of volunteers, with their ethnic diversity exceeding that of the wider OR Society membership.

The Acting Education Manager rekindled our relationship with In2Science. As a result of this, at the end of 2023 we agreed to fund 2 students from disadvantaged backgrounds to undertake work placements with OR professionals. The success rate of In2Science is phenomenal, with the odds of these students going to university after completing their placement up from 10% to 50%.

During October 2023 we hosted a webinar on understanding the challenges for colleagues with ADHD and Autism. The WORAN Special Interest Group celebrated the International Day of Girls and Women in Science with a Land Lecture on the state of play for women in STEM and the role of unions in the movement for gender equality.

The goal for 2024 is to review the Science Council Framework and use this to identify future areas of focus, as our last assessment was three years ago.

Conferences and Events

The return to physical, in-person events was completed in 2023 for all the Society's conferences. The Simulation Workshop was held in Southampton in January 2023, this event in previous years had typically attracted around 70 delegates. In 2023, 125 delegates attended with 45 papers submitted. This represented outstanding growth due to the campaign and work within the Society and the committee.

The Beale Lecture in February 2023 was hosted on Zoom and saw 100+ delegates attend online to listen to Professor Robert Dyson as guest speaker. Also, Jake Clarkson the Doctoral Award Winner presented on Optimal search in discrete locations: extensions and new findings.

The Scenario Planning conference was held in June, the first for five years. We had a good attendance with around 60 delegates. This conference will now move to a bi-annual event due to the success of this recent event and become more of a regular activity within the OR calendar.

Royal Holloway hosted ISMOR in July with 100+ delegates. The conference received excellent feedback, however, the venue was not to the standard that the Society would like, therefore the committee have pursued an alternative venue for 2024 located in Southampton. The event had a mixture of in person and virtual participation, the virtual option was unpopular and so 2024 will be 'in person' only.

For those able to attend OR65 at the University of Bath, it offered a packed conference programme with lots of opportunity to network. Event growth was significant with income growing largely due to 12 paid sponsors compared to 2 in the previous year and around 350 paid delegates, up by nearly 100 from the previous year. This was a sign that the challenging years of covid affecting event attendance were passing and 'in person' events were here to stay as a valuable aspect to our programme of activity. The conference brought together many different areas of OR, with streams such as Systems Thinking and Healthcare passing above 30 submissions per stream. Overall, there was near to 300 abstracts originally submitted with around 250 presented across the conference. The gala dinner was hosted at The Pump Rooms, to launch the 75th anniversary celebration. Bath was a wonderful location to start celebrating the anniversary and the dinner was a sellout. The committee were instrumental in ensuring the success of the conference and worked hard to ensure the programme and social trips were varied and that there were plenty of learning opportunities for both academics and practitioners. The pre-event ECR conference worked well before the main conference and attracted 30 ECR delegates that also attended the main conference.

Additionally, our webinar programme has grown from strength to strength, with 100+ registrations per month. The webinar programme supports a wide range of topics within OR and the Society's EDI programme. The WORAN land lecture was held during October, with a focus on women in OR, unions, and the workplace with Sue Ferns.

The Blackett Lecture was held on the 7th of December at the Royal Society in London, over 120 attendees registered for the event. The 2023 format had 3 speakers; Dr Roger Forder, Paul Clarke CBE and Professor Alison Etheridge of the University of Oxford and the focus of the talks discussed the Past, Present and Future of OR and the Society.

Validate AI (in collaboration with the OR Society) has been holding several events throughout the UK and abroad focusing on AI Assurance and Certification, with the most recent being at the University of Southampton in Autumn 2023 entitled 'OR Enabled AI'. This F2F meeting was well attended, with a workshop format leading to discussion on how OR could support and enable AI throughout the AI life cycle. The total number of SIG events delivered included 28 SIG events and 7 Regional Society events. 70% of SIG events were delivered virtually allowing engagement and attendance from members and non-members from all of the UK and occasionally overseas.

Finally, as always it is important to recognise that our events programme would not have happened without the many volunteers and hard-working OR Society staff members who work tirelessly on the delivery of a full event programme – the Annual Report gives the opportunity to say a big thank you to all our event volunteers.

Publications

The OR Society has six academic journals. These are the *Journal of The Operational Research Society* (JORS), *European Journal of Information Systems* (EJIS), *Knowledge Management Research & Practice* (KMRP), *Journal of Simulation* (JOS), *Health Systems* (HS) and the *Journal of Business Analytics* (JBA). The Publication Committee is chaired by Professor Tom Archibald.

Statistics relating to the usage of the Society's journals show year-on-year increases across all titles continuing the upward trend observed in recent years. The number of article downloads in 2023 exceeded 1.1 million, an increase of 13% compared to 2022. The number of citations remained in line with the previous year. Due to the decline in usage of Twitter, the considerable efforts of the Editorial Teams, the Society and Taylor & Francis have adapted to focussing promotion of the journals on LinkedIn.

The 2022 Impact Factors (published in June 2023) for *JORS*, *EJIS* and *KMRP* all showed increases compared to the 2021 data. *EJIS* continued its remarkable progress. Having increased 4.3 in 2020 to 9.0 in 2021, the Impact Factor of *EJIS* has continued to increase to 9.5 in 2022. *HS* and *JBA* have received Impact Factors for the first time with *HS* receiving an Impact Factor of 1.8 and *JBA* receiving 1.0. A CiteScore (a performance measure similar to Impact Factor derived from the Scopus database) is available for all six journals. The CiteScores published in 2022 showed improvements for all journals compared to the previous year, with the highest increases for *EJIS* and *JOS*.

The journals are led by hard working editorial teams who strive to provide submitting authors with timely and constructive feedback. In 2023, Charles Macal (Argonne National Laboratory, USA) replaced Loo Hay Lee on the editorial team for *JOS*. In July 2023, sadly John Boylan Co-Editor in Chief of *JORS* passed away. The Society will look to recruit to fill this vacancy for *JORS* next year. Giovanni Schiuma stepped down from *KMRP*. The Society will be recruiting to fill this vacancy during the second half of 2024.

The diversity of the editorial boards for each of our journals continues to be monitored and managed. Although some progress was made to increase diversity through appointments in the past year, at the end of 2023 the members of the editorial boards are predominantly male (72%) from North America (41%) or Europe (38%). Progress has been made in appointing Editor-in Chiefs (see EDI section)

Taylor & Francis has changed the way in which volumes are compiled so that 2023 is the first year in which the journals are not constrained by strict page budgets, and this has reduced the backlog significantly. This means we can publish on a timelier basis. All the journals have accumulated a stock of accepted papers waiting to be published in an issue. These papers are published online immediately, but there can be a delay of more than a year before publication in an issue. Going forward, editors will have discretion to increase the size of a volume to ensure more timely publication of papers.

Editors rely on the voluntary contributions of reviewers who provide reports on articles submitted for publication. Acknowledging these valuable contributions is an important element of the Society's strategy for recruiting and retaining reviewers. Reviewers can choose to have their efforts recognised via Publons. In 2023, for the third year, the Society awarded certificates to reviewers who had made particularly helpful contributions to the reviewing process.

The Society continues to develop its strategy for open access and open data with advice and support from Taylor & Francis. In line with Taylor & Francis's basic data sharing policy, all journals encourage authors to share or make open the data supporting the results or analyses presented in their paper where possible. All journals also offer authors the opportunity to publish open access via Taylor & Francis's Open Select publishing program. Of the papers published in the Society's journals in 2023, approximately 16% were published open access. The proposal to convert *HS* to a fully open access journal from 2024 has been put on hold as we are looking to further increase the submissions to the journal before converting. There is a plan to launch a new fully open access journal in 2024.

The Society also publishes two magazines: *Impact* and *Inside OR*.

Impact is published biannually and is aimed at practitioners and potential users of OR. The magazine is freely available in print or electronic versions. The founding editor, Graham Rand, has stepped down after eight years in charge, the Spring 2023 issue was the last issue that he edited. The new editor Maurizio Tomasella started his term from Spring 2023.

Inside OR is the news magazine for Society members and is published monthly. Despite a long-standing wish to stand down, John Crocker continued to edit *InsideOR* throughout 2023 and is due to be replaced in March 2024 by Gavin Blackett.

Carol McLaughlin from the OR Society office and Richard Goodman from Taylor & Francis continue to work with the Editorial Teams to monitor and update our joint publications strategy. They were supported by a new member of the team at the end of the year, Sophie Rouse, who joined as the Publications Coordinator. Our thanks go to all those involved over the past year in supporting and promoting the OR Society's publications.

Education

The key activities for the Education committee are laid out below under its various areas of influence.

OR in Education (ORIE)

ORiE volunteers have attended a variety of events during 2023. These have included:

- New Scientist Live
- Brunel University Career Fair
- The Big Bang Fair
- King David High School Careers Fair
- Patcham High School Careers Fair
- John Hampden Grammar School careers talk
- Lancaster Science and Tech Fair
- Wellington College OR workshop

There was a noticeable falling off of volunteer engagement, possibly due to the incumbent Education Manager departing in May 2023. In tandem the ORiE taskforce were continuing to relook at which of the large-scale events will best align with its objectives. This meant retaining the Society's presence at Big Bang Fair and looking to reformat our presence at New Scientist Live. The taskforce is also developing a volunteer strategy which will be a joint effort with the Pro Bono scheme so that the same strategy sits across the whole organisation.

The annual Careers Open Day could not occur this year due to staff changes, however preparation for Careers Open Day 2024 is already underway.

Apprenticeships

The OR Society is planning to apply to become an “End Point Assessment Organisation” (EPAO) for the Level 7 (L7) postgraduate apprenticeship in the occupation of “OR Specialist”. The Education Manager has explained the intricacies of the application process and the paperwork that needs to be submitted to Ofqual.

The Education committee has also discussed how the role of the Education manager will evolve once the Society becomes an EPAO and the impact it will have on staffing and eventually financial resources. We have asked for information on the role of the Education committee in advising/supervising the assessment procedures. At the moment, it is not clear, and more clarity will be needed so that the committee can receive the right training. Following further investigation and discussion, a comprehensive picture of amount of work involved to submit the application and carry out the day-to-day management has been formed. A meeting has taken place with a specialist EPAO consultant, who has agreed to submit a formal proposal of the options available to the Society at this point.

A L6 (degree level) apprenticeship trailblazer group is almost set up as had been done previously in the case of the L7 apprenticeship.

Joint Mathematical Council (JMC)

The JMC met in February to discuss a few updates. A representative from AMS provided a presentation on the developments to date on the Academy of Mathematical Sciences, Education Scotland gave a presentation on the National Response to Improving Mathematics in Scotland, and the Royal Society gave a presentation on the Mathematical Futures programme.

Following the Prime Minister’s announcement on Maths to 18, a representative from the Department for Education introduced topic and posed some questions for discussion. Council broke into groups to discuss these and give feedback.

Consultations

The Education Committee responded to several consultations including the Royal Society’s Mathematical Futures Programme which advocated for a change in the maths curriculum to encourage core and applied mathematics teaching.

Dr Chiara Carparelli was recruited as the new Education Manager in December 2023. This is an opportunity to review the Committee’s priorities for the following year.

Data science degrees standards

Degree accreditation is important to universities, students and employers, and this could be an important area of growth for the Society. There is an opportunity for the ORS to be involved in the data science degree accreditation, however, this poses a risk that we make accredited data science degrees more appealing than unaccredited OR degrees. It may be worth developing OR degree accreditation alongside participation in the data science degree accreditation scheme. More research needs to be done into the costs for this and how thorough the accreditation process should be. There is also the possibility of accrediting degrees or business schools or both.

The process could also be linked to personal accreditation schemes, such that students taking certain degrees are automatically given credits towards personal accreditation such as ACAP/CAP. This is currently unpopular in the UK, but there is an issue of low awareness amongst students and low demand from employers. Both of these would need to be tackled to see a successful accreditation scheme. It was suggested employers would be easier to approach at first as there is no cost barrier to asking for the qualification.

Research

The Research Committee, chaired by Professor Christine Currie, aims to support the development of operational research (OR) knowledge, and increase the scale and impact of OR research in the UK. In 2023, we saw a transition as five long-standing members completed their extended terms, and eleven new members joined. This increase in recruitment was not just about numbers, but about ensuring representation across

universities, diversity of career stages and gender, and practitioner representation. This expansion also allowed for better Society representation in key academic bodies such as Heads of Departments of Mathematical Sciences, EPSRC, Isaac Newton Institute (INI) and International Centre for Mathematical Sciences, making each member of the OR Society an integral part of our collective efforts.

During 2023, the Committee remained actively engaged in two pivotal initiatives: the Academy of Mathematical Science (AcadMathSci) and the establishment of the Knowledge Exchange Hub for Mathematical Sciences (KE Hub). The Academy aims to be a leading voice for the entire mathematical sciences community, bridging academia, industry and mathematical education. The OR Society has played a pivotal role in these initiatives, with several committee members contributing to Advisory Boards and working groups led by the Council of Mathematical Sciences (CMS). The Committee, in consultation across the Society, responded by taking part in workshops and replying to the consultation questionnaire. Committee members have continued to maintain a dialogue with the AcadMathSci.

In addition to holding a Knowledge Exchange Day, the Committee has supported the development of the KE Hub by identifying KE Champions and improving the links with KE professionals working in OR Groups in UK Universities.

The Committee has also continued to work closely with EPSRC and has a healthy representation of ORS members involved in all the EPSRC's key committees, including the Peer Review College and Strategic Advisory Team. The Committee continued contributing to the development of EPSRC's EDI Strategy, with input given to the Mathematical Sciences consultation on neurodiversity, due to be published next year.

Finally, the committee set an objective to develop an OR Early Career Network, this culminated in a highly successful workshop preceding OR65, attended by 35 individuals. The feedback from attendees unanimously affirmed the workshop's efficacy in meeting its objectives, underscoring the committee's dedication to nurturing the next generation of OR professionals.

Training

During 2023, the Society delivered 21 courses covering a range of OR topics, attracting a total of 135 delegates. The Society re-introduced the in-person courses and 2 courses were held in London and one in Birmingham, virtual delivery methods are still proving to be the most popular.

The training offered by the Society is under review with an active consultation to understand the training needs of our audiences.

Publicity and Membership

2023 was an extremely busy year for marketing combining business as usual activity with the launch of the 75th anniversary.

For the anniversary, 12 case studies were collated as to what memberships means to individuals, a new logo and promotional collateral was written, and a promotional social media campaign run throughout the 75th year.

The frequency of Inside OR has been reduced to every two months, with an e-newsletter supporting the reduce of print in the alternate months. The change in the frequency to Inside OR has allowed time to be focused on increasing engagement on social media, membership acquisition campaigns and providing marketing support to all internal departments.

The Society's LinkedIn page had 3,973 followers a growth of 43% members (an increase of 1.3k). Total engagement outperformed 2022 by 41% reaching 13,489 individuals. Twitter growth was static throughout 2023. The focus for the Society moving forward is engagement through Linked In.

A new membership strategy has been written for implementation during 2024. Areas of focus include member growth; acquisition & retention and increasing engagement within existing membership. New

initiatives will include, a mentorship programme, introduction of a student network and a new members engagement campaign to attract non-members who currently attend our events and training.

Membership fees were reviewed and increased by 5.4% in line with CPI.

A PR company was instructed in September 2023 to support the outreach of the Society and OR in general. From September to December the society received 26 pieces of coverage, 291.5k potential readership and a £24,955 value if advertising had been purchased.

Pro Bono OR

The Steering Group is chaired by Ruth Kaufman and at the end of 2023 the group consisted of: Jane Parkin, Ian Seath, Shamim Rahman, Mike Boyles, Owen Bowden, Kate Hammond, John Lincoln, Ashleigh Monks and Hugo Herrera.

Graham Rand stepped down from the Steering Group in late 2023. His contributions to Pro Bono OR have been greatly appreciated and were formally acknowledged with a letter of thanks from Seb Hargreaves.

Pro Bono OR's dedicated volunteers worked on 14 projects throughout the year, using a variety of OR, analytics and data science methods to help third sector organisations tackle issues such as preventing homelessness, preventing child abuse, and supporting endangered animals and children experiencing bereavement. Feedback from the organisations and volunteer analysts has remained positive.

Feedback from our volunteers:

- *"The OR Pro Bono team were great. They provided comprehensive and useful guidance at the start and as a 'newbie' volunteer I appreciated this. The offers to provide support was appreciated."*

Feedback from third sector organisations:

- *"We engaged more with our own data, which will be helpful for future projects, and also have a better understanding now of a realistic time estimate for how long this type of work might take."*
- *"Very thankful for the work and support that Pro-Bono OR have been able to help us with. It really has been a very useful piece of work."*

The target for new projects this year was 25-30, which was not achieved. We also fell short on our target of 70 new leads generated, as we generated 33. However, the ratio of new leads to new projects started is in line with our target, suggesting our conversion rate is on track.

The third sector continues to face difficulties post-pandemic as the cost of living continues to rise and funding cuts are becoming more common, requiring charities to do more with less. This appears to translate into charities being interested in a pro bono project but waiting to hear on funding before proceeding/not having the capacity to support a project. This explains why some leads do not turn into Pro Bono projects, or there is a considerable lag between the lead generation and the project start.

Other activity included maintaining or rekindling relationships with partner organisations such as the Pro Bono Association, RSS's Statisticians for Society, Pro Bono Economics, DataKind and Data Orchard and the Cranfield Trust. We attended 3 events aimed at volunteers and 2 events aimed at the third sector. Pro Bono OR participated in the annual Volunteers' Week (1-7 June).

The Pro Bono OR webpages were refreshed in 2023, offering a more streamlined and modern look for potential charities and volunteers alike. The Pro Bono blog, which was a third-party website which hosted project adverts, was archived as part of this update. New project adverts now appear on the main ORS website, providing one home for online pro bono information.

Pro Bono record management was streamlined in 2023, reducing the administrative burden of running the programme and facilitating better data analysis. This was achieved via Microsoft Forms, Power Automate and Excel.

Members, Affiliates and Fellows

At the end of the year, The OR Society had 4,057 members, a total growth of 8.7% from 2022.

In addition to the 17 existing corporate partners, there were 3 new corporate partners representing 1,025 members.

There were 394 accreditees, comprising 165 Fellows, 75 Associate Fellows, 50 Associates and 104 Candidate Associates. There were 26 members accredited as Chartered Scientists and 4 as a Registered Scientist.

Awards

- **Goodeve Medal** (awarded for best paper published in JORS in 2022): Awarded to Elvan Gökalp, M. Selim Cakir and Ioannis Kougkoulos "Capacity management of migrant accommodation centre's using approximate dynamic programming.", Journal of The Operational Research Society (2022) 73 (6) 1198-1210.
- **Stafford Beer Medal** (awarded for best paper published in EJIS in 2022): Awarded to Tapani Rinta-Kahila, Ida Someh, Nicole Gillespie, Marta Indulska, Shirley Gregor "Algorithmic Decision-Making and System Destructiveness: A Case of Automatic Debt Recovery.", European Journal of Information Systems, 31 (3) 313-338.
- **KD Tocher Medal** (awarded for best paper published in JOS in 2021/2022): Awarded to Chaitanya Kaligotla, Enver Yücesan and Stephen E. Chick "Diffusion of Competing Rumours on Social Media.", Journal of Simulation 16 (3) 230-250.
- **Griffiths Medal** (awarded for best paper published in Health Systems in 2021/2022): Awarded to Paul R. Harper, Joshua W. Moore and Thomas E. Woolley "Covid-19 Transmission Modelling of Students Returning Home from University", Health Systems, 10 (1) 31-40.
- **Doctoral Award** (awarded for the most distinguished body of research leading to the award of a doctorate in the field of OR in 2022): Awarded to Spyridon Pougkakiotis, University of Dundee, "Regularized Interior Point Methods for Convex Programming".
- **President's Medal** (awarded for the best practical application of OR): Awarded to Adam Mackenzie-Jones (DESNZ), Beth Green (DESNZ), Adam Stannard (DESNZ) Charlie Stewart (DESNZ), Yaadwinder Sidhu (Defra), Katie Gronow (DfT), Mary McKee (DfT) for "The Net Zero Strategy Directorate at the Department for Energy Security and Net Zero: Net Zero Systems tool (NZST) for use in government departments".
- **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): Awarded to John Hopes.
- **Beale Medal** (awarded for best sustained contribution to OR): Awarded to Robert G Dyson.

Finance

Structure of the Funds

The unrestricted elements make up the majority of its funds and covers:

- ongoing operations (previously categorised as the General fund); and
- the Seymour House property together with investments and cash on deposit to cover potential risks of a general nature, the most significant of which would arise if the Society were forced to move quickly to a financial regime in which its publications income was significantly reduced (previously labelled the Reserve Fund).

The restricted funds represent 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 OR projects undertaken for a client organisation.

Review of Operations

The Society's income and expenditure account showed a loss of £63k during the year, on a turnover of £1.4m. This compares with a loss of £274k in 2022. The operating loss (before net gains or losses on investments) was £158K versus a £17k surplus in 2022.

This was a challenging year for the Society as we started to see the effects of the revised Publications contract and reduced revenue through our Journal portfolio. Training income was also down for the year against forecasts. However, cost controls were well managed and there were some positive signs for Events income.

Most operations to support the charitable aims of the Society – such as conferences, special events, 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. In 2023, Publications revenue equated to 60% of the Society's total income. This serves as a reminder of the Society's current financial dependence on the academic publication system; see the section on 'Risk' below.

The Society employed 21 members of staff during 2023 (19.8 full-time-equivalents), compared to 18 (16.6 FTE) during 2022.

Going Concern Statement

The Society has undertaken analysis of its Going Concern status, reviewing the organisation's cashflow position, budget position for 2024 and 2025, level of reserves and areas of consideration under sensitivity analysis. The Board of Trustees / Directors are confident in their assessment of the Society as a 'going concern'.

Assets, Reserves and Investments

The total net assets of the Society fell by almost £100k to £2.3m over the year, with the loss on income and expenditure being offset by a modest increase in investment values although our investments are still £195k down on 2021 values. This reflects the markets' continued turbulence due to global events such as the war in Ukraine. Prudent financial management of its cash resources meant the Society did not need to draw down any of its investment funds during the year, allowing the recovery to take begin.

It is important that the Society maintains an appropriate level of reserves in relation to perceived financial risks. Based on the usual annual costs of running the Society, one year's costs of £900k should be a minimum value for the reserves and the maximum value would then be three years' costs giving a value of £2.7 million. This would cover any growth of the Society over the next few years and release funds to further the Society's aims.

The Society's reserves, with a definition slightly widened from previous years, cover funds which are neither restricted nor designated, less illiquid assets (such as tangible fixed assets). At 31 December 2023, this amounted to £2.0m. The reserves are therefore within their prescribed limits. The Board will bear this in mind when considering opportunities for spending on worthwhile one-off projects that further the Society's objectives.

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.

Risk

The Society's dependency on journal income is the most significant material risk. Our new contract with Taylor & Francis to a large extent mitigates this risk for the Society, for the four years of the contract (finishing in December 2026), by transferring some of it to the publisher. The risk has not disappeared though, and we could never be wholly insulated from any impact that might result from this risk on our publisher. The publications market will be rapidly adapting to the demands of open access over the course of the new contract and this element of income remains at risk.

Work on diversification of revenue streams continues. Apprentices have started work towards the Operational Research specialist level 7 standard which will provide a new source of income from 2024 onwards. However, the costs associated with applying for and subsequently acting as an End Point Assessment Organisation are higher than anticipated since the requirements have tightened considerably under the switch to Ofqual's oversight. Education committee are progressing with options for offering degree course accreditation.

The key strategic risk that OR could be seen as less relevant in the competitive analytics, data science and AI space remains. We have been mitigating this through a number of initiatives led by our Analytics Development Group and are also actively promoting the relevance of OR to data science, robotics and artificial intelligence as well as other overlapping fields. The Government and society's attitude towards mathematical education, understanding statistics and probabilities seem to be in our favour. More generally, we aim to raise the visibility of OR and support outward-looking practice and membership through outreach to other professional societies and to organisations and businesses who may benefit from what OR has to bring and through the variety of topics and speakers at our events.

A further key risk is that The OR Society could be seen as less relevant to OR professionals. We have been mitigating this through the whole range of activities addressing our strategic goals and described elsewhere in this report.

The cost-of-living crisis is an issue for our members (their ability to afford membership, training, events etc.) and the Society's operations itself. A full assessment of the susceptibility of our operations and each P&L line item to inflationary pressures. The modelling ensured that the Board understood the risks and sensitivity of revenue and costs, enabling better informed decisions.

The Board regularly reviews the risk register covering a wide range of operational risks, including IT risks, and, where feasible, puts mitigating action in place.

Key Management Personnel

The Key Management Personnel for the Society comprise the trustees (its Board of Directors) and the Executive Director. No remuneration is payable to trustees for service on the Board.

Basis for Remuneration

The President, Treasurer and President Elect or Immediate Past President review the Executive Director's salary and, when agreed by Finance Committee, a written recommendation is made to Board. The Executive Director leads the process for other staff which is again initially discussed by Finance Committee before the recommendations go to Board for final approval.

Voluntary Contributions

The Society's work in 2023 benefited from voluntary contributions of time, from members and others, through these principal lines of work: refereeing of journal papers; editing of journals; conference organisation; authorship and delivery of talks to regional societies and special interest groups; organisation of regional

networks and special interest groups; the work of the Society's officers; contributions to the administration of the Society, its Awards and its accreditations through service on Board and the Society's committees.

It is estimated that a total of 5,000 person-days were contributed in 2023. 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.

Fundraising

The OR Society does not engage in public fundraising activities by professional fundraisers or commercial participators. The charity has not received any fundraising complaints in the year.

Related Parties

The Society is a member of EURO, the Association of European Operational Research Societies, and IFORS, the International Federation of Operational Research Societies. It shares information and works closely with other operational research societies around the world, particularly its counterpart in the USA, INFORMS. The Society pays membership fees to both EURO and IFORS.

The Society is also a member of the Council for Mathematical Sciences, CMS. It works with the other member bodies (Institute for Mathematics & its Applications, London Mathematical Society, Royal Statistical Society and Edinburgh Mathematical Society) on relationships to research funding bodies, relevant consultations and various other initiatives. Currently this includes the development of plans for a national academy for mathematical sciences.

The Society's related party transactions for the year ended 31 December 2023 have been disclosed in note 8 of the financial statements.

Objectives for 2024

During 2023, Board produced a revised version of its 3–5-year goals and priorities. These build on those in place for the previous strategic planning phase and represent exciting opportunities for the Society and the wider OR community. The strategic pillars were revisited and confirmed to remain relevant and fit for purpose. They are to: raise awareness of the **importance of OR**; support **OR knowledge development**; support **OR education**; grow **membership and wider reach**; ensure **financial sustainability** of the Society; and address **diversity and inclusion challenges** in OR and the OR Society.

Work has already started on many of the initiatives that we hope will come to fruition in the next year or so:

- continue celebrations for the Society's 75th anniversary, capitalising on the opportunities to raise awareness of both the Society and operational research;
- working with Taylor & Francis to capitalise on its strategy to maximise the value of our current publications contract, develop robust publishing models including launching our first fully open access journal to deal with opportunities and challenges presented by open access publishing and Plan S;
- ensuring that OR continues to be fully involved in the establishment of the Academy for Mathematical Sciences;
- building policy influence with key Government contacts and connect with other key decision makers;
- implementing an engagement plan and training modules for the analytics / artificial Intelligence / data science community, and specifically implementing a self-learning modular course on AI safety;
- supporting the continued growth of the Women in OR and Early Careers networks;
- Relaunching regional societies as regional networks and providing a minimum SLA and centralised support to enable them to flourish
- Launching a new website and CRM to improve our digital infrastructure, member functionality and usability and improve data capture and reporting;
- Conduct a branding a repositioning exercise
- finalise Ofqual Awarding body status as an End point Assessment Organisation and further support the uptake of the level 7 OR apprenticeship scheme for OR Specialist. Widen our portfolio of qualifications;
- strengthening relationship with key bodies such UKRI, Royal Society, Science Council and other learned societies;
- investigating diversification of income, including exploring new streams (accrediting University courses, fundraising / donations, sponsorship);
- implementing our diversity plan based on recommendations from the diversity champion;
- demonstrating the relevance of OR to complex problems and big issues through targeted PR campaigns.

These developments will be on top of our existing broad sweep of services: conferences, events, lectures and training; publications; Pro Bono OR and OR in Schools; representing The OR Society on bodies including The Council for Mathematical Sciences, the Science Council, EURO and IFORS; and our more inward-looking activities to improve sustainability, efficiency and effectiveness.

For a relatively small professional body in an uncertain world, there are many challenges to overcome. By undertaking these activities, we aim not just to meet the challenges, but to grow the profession and The OR Society's contribution and make the most of the opportunities awaiting us.

Information about the Society

- (1) The Operational Research Society is a company limited by guarantee (no. 00663819). 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 2023 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 2023

| | |
|------------------------------------|---------------------------------|
| G OWUSU President | T W ARCHIBALD |
| E K BURKE Immediate Past President | R BYDE |
| A C PAGEL Vice President | J MEDHURST |
| S L LORRIMER Vice President | N MORRILL (resigned 21/12/2023) |
| R A SCOTT Hon. Treasurer | C J PHILLIPS |
| V SENA | |

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 governance and strategy and the General Council, with its wide representation, provides advice, feedback and challenge 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 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) |
| Analytics Development Group | (a) |
| Awards Panel | (a) |
| Education | (b) |
| Events | (a), (b) |
| Finance | Management of financial aspects |
| Investment | Management of investments |
| Nominations | Volunteer recruitment to governance roles |
| Past President's/President Elect's | Elections, planning & administrative reviews |
| Pro Bono Steering Group | (a) |
| Publications | (a) |
| Publicity, Membership & Website | (a) |
| Research | (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 Executive Director is:

S J Hargreaves
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:

Sayer Vincent LLP
110 Golden Lane
LONDON
EC1Y 0TL

Its Investment Adviser is:

Tom Quicke
Rathbones Investec
30 Gresham Street
LONDON
EC2V 7QN

Its Stockbrokers are:

Rathbones Investec
30 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 and accept the standard ESG commitments of the Investment house Rathbones Investec.

(9) These particulars are published in compliance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019).

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 OR 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 OR 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 OR 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 OR

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.

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

The trustees (who are also directors of The Operational Research Society for the purposes of company law) are responsible for preparing the trustees' annual report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the

incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the trustees are required to:

- Select suitable accounting policies and then apply them consistently;
- Observe the methods and principles in the Charities SORP;
- Make judgements and estimates that are reasonable and prudent;
- State whether applicable UK Accounting Standards and statements of recommended practice have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation.

The trustees are responsible for keeping adequate accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

In so far as the trustees are aware:

- There is no relevant audit information of which the charitable company's auditor is unaware; and
- The trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

The trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

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 2023, two members of the Board completed their term of office: E K BURKE & R BYDE.

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.

The trustees' annual report has been prepared in accordance with the provisions applicable to companies subject to the small companies' regime.

Approval of report

We approve this report and the audited accounts for the year 1 January to 31 December 2023 and recommend their adoption by the Society at its Annual General Meeting.

G OWUSU President R A SCOTT Hon Treasurer

T W ARCHIBALD
J MEDHURST

S PETROVIC
A C PAGEL

H TEWKESBURY
C J PHILLIPS

S LORRIMER
V SENA C CURRIE

Being the elected officers and members of the Board of The Operational Research Society as at 22 May 2024.

S Hargreaves
Executive Director
May 2024

Accounts

for the year ended 31 December 2023

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF OPERATIONAL RESEARCH SOCIETY

Opinion

We have audited the financial statements of Operational Research Society (the 'charitable company') for the year ended 31 December 2023 which comprise the statement of financial activities, balance sheet, statement of cash flows and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- Give a true and fair view of the state of the charitable company's affairs as at 31 December 2023 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
- Have been prepared in accordance with the requirements of the Companies Act 2006

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the charitable company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on Operational Research Society's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

Other information

The other information comprises the information included in the trustees' annual report, other than the financial statements and our auditor's report thereon. The trustees are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

In our opinion, based on the work undertaken in the course of the audit:

- The information given in the trustees' annual report, for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The trustees' annual report has been prepared in accordance with applicable legal requirements.

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the charitable company and its environment obtained in the course of the audit, we have not identified material misstatements in the trustees' annual report. We have nothing to report in respect of the following matters in relation to which 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; or
- The directors were not entitled to prepare the financial statements in accordance with the small companies' regime and take advantage of the small companies' exemptions in preparing the trustees' annual report and from the requirement to prepare a strategic report.

Responsibilities of Trustees

As explained more fully in the statement of trustees' responsibilities set out in the trustees' annual report, the trustees (who are also the directors of the charitable company 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, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charitable company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charitable company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud are set out below.

Capability of the audit in detecting irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, our procedures included the following:

- We enquired of management and the finance committee, which included obtaining and reviewing supporting documentation, concerning the charity's policies and procedures relating to:
 - Identifying, evaluating, and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected, or alleged fraud;
 - The internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations.
- We inspected the minutes of meetings of those charged with governance.
- We obtained an understanding of the legal and regulatory framework that the charity operates in, focusing on those laws and regulations that had a material effect on the financial statements or that had a fundamental effect on the operations of the charity

from our professional and sector experience.

- We communicated applicable laws and regulations throughout the audit team and remained alert to any indications of non-compliance throughout the audit.
- We reviewed any reports made to regulators.
- We reviewed the financial statement disclosures and tested these to supporting documentation to assess compliance with applicable laws and regulations.
- We performed analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud.
- In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments, assessed whether the judgements made in making accounting estimates are indicative of a potential bias and tested significant transactions that are unusual or those outside the normal course of business.

Because of the inherent limitations of an audit, there is a risk that we will not detect all irregularities, including those leading to a material misstatement in the financial statements or non-compliance with regulation. This risk increases the more that compliance with a law or regulation is removed from the events and transactions reflected in the financial statements, as we will be less likely to become aware of instances of non-compliance. The risk is also greater regarding irregularities occurring due to fraud rather than error, as fraud involves intentional concealment, forgery, collusion, omission or misrepresentation.

A further description of our responsibilities is available on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Use of our report

This report is made solely to the charitable company'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 charitable company'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 charitable company and the charitable company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Fleur Holdon
Senior statutory auditor
29 May 2024

for and on behalf of
Sayer Vincent LLP
Statutory Auditor
110 Golden Lane
LONDON
EC1Y 0TG

Operational Research Society

Statement of financial activities (incorporating an income and expenditure account)

For the year ended 31 December 2023

| | Note | Unrestricted £ | Restricted £ | 2023 Total £ | Unrestricted £ | Restricted £ | 2022 Total £ |
|--|------|-------------------|-----------------|--------------------|-------------------|-----------------|--------------------|
| Income from: | | | | | | | |
| Charitable activities | | | | | | | |
| Subscriptions | 2 | 159,861 | – | 159,861 | 147,613 | – | 147,613 |
| Events and Conferences | 2 | 260,951 | 36,254 | 297,205 | 155,501 | – | 155,501 |
| Training | 2 | 63,204 | – | 63,204 | 107,753 | – | 107,753 |
| Publications | 2 | 822,766 | – | 822,766 | 1,060,539 | – | 1,060,539 |
| Accreditation | 2 | 9,745 | – | 9,745 | 8,803 | – | 8,803 |
| Websites / Digital Services | 2 | 200 | – | 200 | 6,271 | – | 6,271 |
| Investments | 3 | 47,232 | – | 47,232 | 41,585 | 2,565 | 44,150 |
| Total income | | 1,363,959 | 36,254 | 1,400,213 | 1,528,065 | 2,565 | 1,530,630 |
| Expenditure on: | | | | | | | |
| Raising funds | 4 | 12,473 | – | 12,473 | 12,439 | – | 12,439 |
| Charitable activities | | | | | | | |
| Subscriptions | 4 | 138,608 | – | 138,608 | 143,682 | – | 143,682 |
| Events and Conferences | 4 | 381,407 | – | 381,407 | 358,719 | – | 358,719 |
| Training | 4 | 97,793 | – | 97,793 | 113,932 | – | 113,932 |
| Apprenticeships | 4 | 51,565 | – | 51,565 | 3,186 | – | 3,186 |
| Publications | 4 | 274,723 | – | 274,723 | 297,509 | – | 297,509 |
| Accreditation | 4 | 17,906 | – | 17,906 | 16,793 | – | 16,793 |
| Websites / Digital Services | 4 | 157,047 | – | 157,047 | 186,898 | – | 186,898 |
| Other Charitable expenditure | 4 | 426,320 | – | 426,320 | 380,630 | – | 380,630 |
| Total expenditure | | 1,557,842 | – | 1,557,842 | 1,513,788 | – | 1,513,788 |
| Net income / (expenditure) before net gains / (losses) on investments | | (193,883) | 36,254 | (157,629) | 14,277 | 2,565 | 16,842 |
| Net gains / (losses) on investments | | 94,094 | 536 | 94,630 | (277,025) | (13,457) | (290,482) |
| Net income / (expenditure) for the year | | (99,789) | 36,790 | (62,999) | (262,748) | (10,892) | (273,640) |
| Transfers between funds | | – | – | – | – | – | – |
| Net movement in funds | | (99,789) | 36,790 | (62,999) | (262,748) | (10,892) | (273,640) |
| Reconciliation of funds: | | | | | | | |
| Total funds brought forward | | 2,315,217 | 62,456 | 2,377,673 | 2,577,965 | 73,348 | 2,651,313 |
| Total funds carried forward | | 2,215,428 | 99,246 | 2,314,674 | 2,315,217 | 62,456 | 2,377,673 |

All of the above results are derived from continuing activities. There were no other recognised gains or losses other than those stated above. Movements in funds are disclosed in Note 18 to the financial statements.

Balance sheet

Company no. 00663819

As at 31 December 2023

| | Note | £ | 2023 £ | £ | 2022 £ |
|--|------|----------------|------------------|----------------|------------------|
| Fixed assets: | | | | | |
| Tangible assets | 10 | | 214,137 | | 216,835 |
| Intangible assets | 11 | | 12,500 | | – |
| Investments | 12 | | 1,821,091 | | 1,762,536 |
| | | | <u>2,047,728</u> | | <u>1,979,371</u> |
| Current assets: | | | | | |
| Debtors | 13 | 296,593 | | 380,303 | |
| Cash at bank and in hand | | 193,108 | | 224,469 | |
| | | <u>489,701</u> | | <u>604,772</u> | |
| Liabilities: | | | | | |
| Creditors: amounts falling due within one year | 14 | (222,755) | | (206,470) | |
| | | | | | |
| Net current assets | | | <u>266,946</u> | | <u>398,302</u> |
| Total net assets | | | <u>2,314,674</u> | | <u>2,377,673</u> |
| | | | | | |
| The funds of the charity: | 17 | | | | |
| Restricted Funds | | 99,246 | | 62,456 | |
| Unrestricted Funds | | 2,215,428 | | 2,315,217 | |
| | | | | | |
| Total unrestricted and restricted funds | | | <u>2,314,674</u> | | <u>2,377,673</u> |
| Total charity funds | | | <u>2,314,674</u> | | <u>2,377,673</u> |

Approved by the trustees on 22 May 2024 and signed on their behalf by

R. A. Scott
Honorary TreasurerG. Owusu
President

Statement of cash flows

For the year ended 31 December 2023

| | 2023 £ | £ | 2022 £ | £ |
|---|---------------------------|-----------------|--------------------------------|---|
| Cash flows from operating activities | | | | |
| Net (expenditure)/income for the reporting period (as per the statement of financial activities) | (62,999) | | (273,640) | |
| Depreciation and amortisation charges | 27,778 | | 68,962 | |
| Losses/(gains) on investments | (94,630) | | 290,482 | |
| Dividends and interest from investments | (47,232) | | (44,150) | |
| (Increase)/decrease in debtors | 83,710 | | (168,008) | |
| Increase/(decrease) in creditors | 16,285 | | 34,205 | |
| Net cash used in operating activities | (77,088) | | (92,149) | |
| Cash flows from investing activities: | | | | |
| Dividends and interest from investments | 47,232 | | 44,150 | |
| Purchase of fixed assets | (25,080) | | (4,335) | |
| Purchase of intangible assets | (12,500) | | - | |
| Proceeds from sale of investments | 629,661 | | 436,292 | |
| Purchase of investments | (646,675) | | (419,180) | |
| Net cash provided by investing activities | (7,362) | | 56,927 | |
| Change in cash and cash equivalents in the year | (84,450) | | (35,222) | |
| Cash and cash equivalents at the beginning of the year | 299,781 | | 335,003 | |
| Cash and cash equivalents at the end of the year | 215,331 | | 299,781 | |
| Analysis of cash and cash equivalents and of net debt | | | | |
| | At 1 January 2023 £ | Cash flows £ | At 31 December 2023 £ | |
| Cash at bank and in hand | 224,469 | (31,361) | 193,108 | |
| Cash deposited with investment brokers | 75,312 | (53,089) | 22,223 | |
| Total cash and cash equivalents | 299,781 | (84,450) | 215,331 | |

1 Accounting policies

a) Statutory information

The Operational Research Society is a charitable company limited by guarantee and is incorporated in England and Wales.

The registered office address is 12 Edward Street, Birmingham, B1 2RX, UK

b) Basis of preparation

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) – (Charities SORP FRS 102), The Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

c) Public benefit entity

The charity meets the definition of a public benefit entity under FRS 102.

d) Preparation of the accounts on a going concern basis

The Operational Research Society operates as a going concern. The trustees consider there are no material uncertainties about the charity's ability to continue as a going concern.

The Society operates a reserves policy that reflects its critical dependence on journal income.

The policy sets the minimum level of reserves at one year's fixed running costs of £900k to keep the charity viable whilst alternative funding is found.

The maximum level is to be set at three years' running costs or £2.7 million. The charity is currently meeting its reserves target.

e) Key estimates and judgements

When preparing the financial statements, management makes a number of judgements, estimates and assumptions about the recognition and measurement of assets, liabilities, income and expenses. The company amortises fixed assets over their estimated useful lives. The estimation of the useful lives of assets is based on historic performance as well as expectations about future use and therefore requires estimates and assumptions to be applied by management. The actual lives of these assets can vary depending on a number of factors, including the maintenance and level of upkeep of the software systems.

f) Income

Income is recognised when the charity has entitlement to the funds, any performance conditions attached to the income have been met, it is probable that the income will be received and that the amount can be measured reliably. Income from government and other grants, whether 'capital' grants or 'revenue' grants, is recognised when the charity has entitlement to the funds, any performance conditions attached to the grants have been met, it is probable that the income will be received and the amount can be measured reliably and is not deferred. Income received in advance of the provision of a specified service is deferred until the criteria for income recognition are met.

g) Dividends and investment income

Interest and dividends on funds held on deposit or invested is included when receivable and the amount can be measured reliably by the charity; this is normally upon notification of the interest or dividend paid or payable by the relevant institution.

h) Expenditure

Expenditure is recognised once there is a legal or constructive obligation to make a payment to a third party, it is probable that settlement will be required and the amount of the obligation can be measured reliably. Expenditure is classified under the following activity headings:

Costs of raising funds relate to the costs incurred by the charity in inducing third parties to make voluntary contributions to it, as well as the cost of any activities with a fundraising purpose.

Expenditure on charitable activities includes the costs of delivering services, exhibitions and other educational activities undertaken to further the purposes of the charity and their associated support costs.

Other expenditure represents those items not falling into any other heading.

i) 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.

1 Accounting policies (continued)

j) Allocation of costs

Salaries, depreciation, websites / digital services 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.

Allocation of support and governance costs:

| | |
|------------------------------|-----|
| Raising funds | 0% |
| Subscriptions | 13% |
| Events and Conferences | 19% |
| Training | 6% |
| Apprenticeships | 0% |
| Publications | 14% |
| Accreditation | 2% |
| Websites / Digital Services | 18% |
| Other Charitable expenditure | 28% |

k) Tangible and Intangible fixed assets

Tangible and intangible 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 of tangible fixed assets is charged on a straight line basis at the following rates:

| | |
|--|-----|
| Long leasehold building | 2% |
| Office machines and computer equipment | 33% |
| Fixtures and fittings | 10% |

Amortisation of Intangible fixed assets is charged on a straight line basis at the following rate:

| | |
|------------------|-----|
| Software systems | 25% |
|------------------|-----|

The amortisation rate charged is based on management's best estimate of the useful life of the software systems.

l) Investments

Investments are a form of basic financial instrument and are initially recognised at their transaction value and subsequently measured at their fair value as at the balance sheet date using the closing quoted market price. Any change in fair value will be recognised in the statement of financial activities. Investment gains and losses, whether realised or unrealised, are combined and shown in the heading "Net gains/(losses) on investments" in the statement of financial activities. The charity does not acquire put options, derivatives or other complex financial instruments.

m) Debtors

Trade and other debtors are recognised at the settlement amount due after any trade discount offered. Prepayments are valued at the amount prepaid net of any trade discounts due.

n) Cash at bank and in hand

Cash at bank and cash in hand includes cash and short term highly liquid investments.

o) Creditors and provisions

Creditors and provisions are recognised where the charity has a present obligation resulting from a past event that will result in the transfer of funds to a third party and the amount due to settle the obligation can be measured or estimated reliably. Creditors and provisions are normally recognised at their settlement amount after allowing for any trade discounts due.

p) Pensions

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

q) Financial instruments

The Society only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are initially recognised at transaction value and subsequently measured at their settlement value.

2 Income from charitable activities

| | Unrestricted £ | Restricted £ | 2023 Total £ | Unrestricted £ | Restricted £ | 2022 Total £ |
|--|-------------------|-----------------|--------------------|-------------------|-----------------|--------------------|
| Journal of The OR Society / Knowledge Management Research & Practice / Journal of Simulation | 603,761 | – | 603,761 | 759,963 | – | 759,963 |
| Inside OR | 1,324 | – | 1,324 | 2,021 | – | 2,021 |
| European Journal of Information Systems / Health Systems / Journal of Business Analytics | 215,155 | – | 215,155 | 295,273 | – | 295,273 |
| Other publications | 2,526 | – | 2,526 | 3,282 | – | 3,282 |
| Sub-total for Publications | 822,766 | – | 822,766 | 1,060,539 | – | 1,060,539 |
| Subscriptions | 159,861 | – | 159,861 | 147,613 | – | 147,613 |
| Events and Conferences | 260,951 | 36,254 | 297,205 | 155,501 | – | 155,501 |
| Training | 63,204 | – | 63,204 | 107,753 | – | 107,753 |
| Accreditation | 9,745 | – | 9,745 | 8,803 | – | 8,803 |
| Websites / Digital Services | 200 | – | 200 | 6,271 | – | 6,271 |
| Total income from charitable activities | 1,316,727 | 36,254 | 1,352,981 | 1,486,480 | – | 1,486,480 |

During the year an amount of £36,254 was transferred to us from MISTA (Multidisciplinary in Scheduling: Theory and Applications) to be disbursed over the next 10 years under pre-determined conditions for the purpose of running MISTA based events within OR events and conferences.

3 Income from investments

| | Unrestricted £ | Restricted £ | 2023 Total £ | Unrestricted £ | Restricted £ | 2022 Total £ |
|--------------------------------|-------------------|-----------------|--------------------|-------------------|-----------------|--------------------|
| Income from Listed Investments | 44,152 | – | 44,152 | 41,071 | – | 41,071 |
| Interest on Bank Deposits | 2,940 | – | 2,940 | 514 | – | 514 |
| Profit on Sale of Fixed Assets | 140 | – | 140 | – | – | – |
| Distributions – CAF | – | – | – | – | 2,565 | 2,565 |
| | 47,232 | – | 47,232 | 41,585 | 2,565 | 44,150 |

Operational Research Society

Notes to the financial statements

For the year ended 31 December 2023

4a Analysis of expenditure (current year)

| | Raising funds £ | Charitable activities | | | | | | | | Support and governance costs £ | 2023 Total £ | 2022 Total £ |
|---------------------------------|--------------------|-----------------------|-----------------------------|---------------|-----------------------|-------------------|--------------------|---------------------------------|----------------------------------|-----------------------------------|--------------------|--------------------|
| | | Subscriptions £ | Events and Conferences £ | Training £ | Apprentice-ships £ | Publications £ | Accreditation £ | Website / Digital Services £ | Other Charitable Activities £ | | | |
| Staff costs (Note 6) | | 83,610 | 122,958 | 38,641 | – | 88,835 | 10,830 | 72,083 | 196,272 | 73,794 | 687,023 | 772,631 |
| Recruitment costs | – | 1,762 | 2,592 | 815 | – | 1,873 | 228 | 1,519 | 4,137 | 1,556 | 14,482 | 34,659 |
| Establishment Costs | – | 4,083 | 6,004 | 1,887 | – | 4,338 | 529 | 3,520 | 9,585 | 3,604 | 33,550 | 20,693 |
| Postage and phones | – | 1,102 | 2,082 | 1,034 | – | 3,498 | 14 | 135 | 1,310 | 483 | 9,658 | 10,658 |
| Office Costs | – | 7,431 | 10,928 | 7,431 | – | 7,868 | 437 | – | 7,431 | 2,186 | 43,712 | 29,353 |
| Computer s/ware and maintenance | – | 8,986 | 5,990 | 2,995 | – | 8,387 | – | 20,967 | 12,580 | – | 59,905 | 51,038 |
| Website | – | 6,667 | 4,444 | 2,222 | – | 6,222 | – | 15,555 | 9,333 | – | 44,443 | 35,506 |
| Bank Charges | – | 2,773 | 3,795 | 2,163 | – | – | – | – | – | – | 8,731 | 6,959 |
| Legal and Professional Fees | 12,473 | – | – | – | – | – | – | – | – | 48,436 | 60,909 | 34,206 |
| Other Direct costs | – | 4,218 | 195,739 | 32,528 | 51,565 | 134,295 | 2,791 | – | 146,515 | – | 567,651 | 449,123 |
| Depreciation & Amortisation | – | 978 | 2,032 | 232 | – | 1,102 | 462 | 19,733 | 2,546 | 693 | 27,778 | 68,962 |
| | 12,473 | 121,610 | 356,564 | 89,948 | 51,565 | 256,418 | 15,291 | 133,512 | 389,709 | 130,752 | 1,557,842 | 1,513,788 |
| Support and governance costs | – | 16,998 | 24,843 | 7,845 | – | 18,305 | 2,615 | 23,535 | 36,611 | (130,752) | – | |
| Total expenditure 2023 | 12,473 | 138,608 | 381,407 | 97,793 | 51,565 | 274,723 | 17,906 | 157,047 | 426,320 | – | 1,557,842 | |
| Total expenditure 2022 | 12,439 | 143,682 | 358,719 | 113,932 | 3,186 | 297,509 | 16,793 | 186,898 | 380,630 | – | | 1,513,788 |

Other Charitable Activities covers the remaining non-revenue earning activities carried out in pursuit of the Society's charitable aims. It includes: library, public information about OR, third sector pro bono, research support, strategic initiatives, regional societies, special interest groups, awards and scholarships.

Other Direct Costs includes the physical costs of putting on events, and producing our publications as well as costs of promoting OR and membership and support of other learned societies.

The Operational Research Society

Notes to the financial statements

For the year ended 31 December 2023

4b Analysis of expenditure (prior year)

| | Charitable activities | | | | | | | | | | |
|---------------------------------|-----------------------|--------------------|-----------------------------|----------------|-----------------------|-------------------|--------------------|---------------------------------|----------------------------------|-----------------------------------|------------------|
| | Raising funds £ | Subscriptions £ | Events and Conferences £ | Training £ | Apprentice-ships £ | Publications £ | Accreditation £ | Website / Digital Services £ | Other Charitable Activities £ | Support and governance costs £ | 2022 Total £ |
| Staff costs (Note 6) | – | 94,028 | 138,280 | 43,456 | – | 99,904 | 12,179 | 81,065 | 220,728 | 82,991 | 772,631 |
| Recruitment costs | – | 4,218 | 6,203 | 1,949 | – | 4,482 | 546 | 3,636 | 9,902 | 3,723 | 34,659 |
| Establishment Costs | – | 2,518 | 3,703 | 1,164 | – | 2,676 | 326 | 2,171 | 5,912 | 2,223 | 20,693 |
| Postage and phones | – | 1,216 | 2,298 | 1,141 | – | 3,861 | 15 | 149 | 1,445 | 533 | 10,658 |
| Office Costs | – | 4,990 | 7,338 | 4,990 | – | 5,284 | 293 | – | 4,990 | 1,468 | 29,353 |
| Computer s/ware and maintenance | – | 7,656 | 5,104 | 2,552 | – | 7,145 | – | 17,863 | 10,718 | – | 51,038 |
| Website | – | 5,326 | 3,551 | 1,775 | – | 4,971 | – | 12,427 | 7,456 | – | 35,506 |
| Bank Charges | – | 2,210 | 3,025 | 1,724 | – | – | – | – | – | – | 6,959 |
| Legal and Professional Fees | 12,439 | – | – | – | – | – | – | – | – | 21,767 | 34,206 |
| Other Direct costs | – | 4,217 | 162,431 | 47,739 | 3,186 | 150,430 | – | – | 81,120 | – | 449,123 |
| Depreciation & Amortisation | – | 2,428 | 5,046 | 577 | – | 2,737 | 1,146 | 48,991 | 6,321 | 1,716 | 68,962 |
| | 12,439 | 128,807 | 336,979 | 107,067 | 3,186 | 281,490 | 14,505 | 166,302 | 348,592 | 114,421 | 1,513,788 |
| Support and governance costs | – | 14,875 | 21,740 | 6,865 | – | 16,019 | 2,288 | 20,596 | 32,038 | (114,421) | – |
| Total expenditure 2022 | 12,439 | 143,682 | 358,719 | 113,932 | 3,186 | 297,509 | 16,793 | 186,898 | 380,630 | – | 1,513,788 |
| Total expenditure 2021 | 13,145 | 137,599 | 227,392 | 105,501 | 2,000 | 280,778 | 15,598 | 182,215 | 336,006 | – | |

Other Charitable Activities covers the remaining non-revenue earning activities carried out in pursuit of the Society's charitable aims. It includes: library, public information about OR, third sector pro bono, research support, strategic initiatives, regional societies, special interest groups, awards and scholarships.

For the year ended 31 December 2023**5 Net income / (expenditure) for the year**

This is stated after charging / (crediting):

| | 2023 £ | 2022 £ |
|--|-----------|-----------|
| Depreciation and amortisation | 27,778 | 68,962 |
| Auditor's remuneration (excluding VAT): Audit | 10,400 | 9,750 |

6 Analysis of staff costs, trustee remuneration and expenses, and the cost of key management personnel

Staff costs were as follows:

| | 2023 £ | 2022 £ |
|-----------------------|----------------|----------------|
| Salaries and wages | 570,821 | 642,043 |
| Social security costs | 54,546 | 64,489 |
| Pension costs | 61,656 | 66,099 |
| | 687,023 | 772,631 |

The following number of employees received employee benefits (excluding employer pension costs and employer's national insurance) during the year between:

| | 2023 No. | 2022 No. |
|-------------------|-------------|-------------|
| £60,000 – £69,999 | – | 1 |
| £80,000 – £89,999 | 1 | – |
| £90,000 – £99,999 | – | 1 |

The key management personnel of the Society comprise the Executive Director, the Head of Membership Engagement and the Head of Professional Services. In 2022 key management solely comprised of the Executive Director. The total employee benefits (including pension contributions and employer's national insurance) of the key management personnel were £202,328 (2022: £111,308).

No remuneration was paid or is payable to Trustees for service on the Board for the year (2022: £nil).

Trustees' expenses represents the payment or reimbursement of travel and subsistence costs totalling £6,248 (2022: £544) incurred by 9 (2022: 8) members relating to attendance at meetings of the trustees.

7 Staff numbers

The average number of employees (head count based on number of staff employed) during the year was 16.3 (2022: 17.7).

Staff are split across the activities of the charity as follows:

| | 2023 | | 2022 | |
|-------------------------------|-------------|-------------|-------------|-------------|
| | Headcount | FTE | Headcount | FTE |
| Charitable activities | 13.3 | 11.4 | 14.7 | 13.6 |
| Management and administration | 3.0 | 3.0 | 3.0 | 3.0 |
| | 16.3 | 14.4 | 17.7 | 16.6 |

8 Related party transactions

In 2022, Gavin Blackett, as part of his Society role as the previous Executive Director, was also a Director of Edward Street Management Limited, the company that managed the Society's buildings car park. During 2022 the Society paid rent to the company of £3,030.

Also, in 2022, Amanda Blackett, the wife of Gavin Blackett, the Society's Executive Director, was employed by the Society. Amanda received an appropriate salary for the role undertaken, in line with market rates.

In 2023, Seb Hargreaves as part of his Society role as the Executive Director, was also a Director of Edward Street Management Limited, the company that managed the Society's buildings car park. During 2023 the Society paid rent to the company of £3,030.

There are no donations from related parties which are outside the normal course of business and no restricted donations from related parties.

9 Taxation

The charity is exempt from corporation tax as all its income is charitable and is applied for charitable purposes.

10 Tangible fixed assets

| Cost | Long leasehold land and buildings £ | Office equipment £ | Fixtures and fittings £ | Total £ |
|-------------------------------|---|--------------------------|-------------------------------|--------------------|
| At the start of the year | 314,306 | 57,743 | 130,418 | 502,467 |
| Additions in year | – | 18,447 | 6,633 | 25,080 |
| Disposals in year | – | (42,509) | – | (42,509) |
| At the end of the year | 314,306 | 33,681 | 137,051 | 485,038 |
| Depreciation | | | | |
| At the start of the year | 182,294 | 55,048 | 48,290 | 285,632 |
| Charge for the year | 6,286 | 7,787 | 13,705 | 27,778 |
| Disposals | – | (42,509) | – | (42,509) |
| At the end of the year | 188,580 | 20,326 | 61,995 | 270,901 |
| Net book value | | | | |
| At the end of the year | 125,726 | 13,355 | 75,056 | 214,137 |
| At the start of the year | 132,012 | 2,695 | 82,128 | 216,835 |

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.

11 Intangible fixed assets

| | Software systems £ | Total £ |
|--------------------------|--------------------------|----------------|
| Cost | | |
| At the start of the year | 206,672 | 206,672 |
| Additions in year | 12,500 | 12,500 |
| At the end of the year | 219,172 | 219,172 |
| Amortisation | | |
| At the start of the year | 206,672 | 206,672 |
| Charge for the year | – | – |
| At the end of the year | 206,672 | 206,672 |
| Net book value | | |
| At the end of the year | 12,500 | 12,500 |
| At the start of the year | – | – |

12 Listed investments

| | 2023 £ | 2022 £ |
|---|------------------|-----------|
| Fair value at the start of the year | 1,687,224 | 1,994,818 |
| Additions at cost | 646,675 | 419,180 |
| Disposal proceeds | (629,661) | (436,292) |
| Net gain/(loss) on change in fair value | 94,630 | (290,482) |
| | 1,798,868 | 1,687,224 |
| Cash held by investment broker pending reinvestment | 22,223 | 75,312 |
| Fair value at the end of the year | 1,821,091 | 1,762,536 |
| Investments comprise: | | |
| | 2023 £ | 2022 £ |
| UK Common investment funds | 163,231 | 158,566 |
| Shares listed on the London Stock Exchange | 393,900 | 504,289 |
| UK Property and assets | 322,081 | 306,021 |
| Overseas Investment funds | 138,466 | 181,510 |
| Overseas Shares | 803,413 | 536,838 |
| | 1,821,091 | 1,687,224 |

13 Debtors

| | 2023 £ | 2022 £ |
|-----------------|----------------|----------------|
| Trade debtors | 36,957 | 63,838 |
| Prepayments | 61,553 | 68,470 |
| Accrued income | 155,655 | 223,522 |
| Recoverable VAT | 42,428 | 24,473 |
| | 296,593 | 380,303 |

14 Creditors: amounts falling due within one year

| | 2023 £ | 2022 £ |
|------------------------------|----------------|----------------|
| Trade creditors | 46,371 | 35,041 |
| Taxation and social security | 22,593 | 28,783 |
| Other creditors | 19,224 | 4,238 |
| Accruals | 77,310 | 94,549 |
| Deferred income (note 15) | 57,257 | 43,859 |
| | 222,755 | 206,470 |

15 Deferred income

| | 2023 £ | 2022 £ |
|---------------------------------------|---------------|---------------|
| Balance at the beginning of the year | 43,859 | 31,051 |
| Amount released to income in the year | (43,859) | (31,051) |
| Amount deferred in the year | 57,257 | 43,859 |
| Balance at the end of the year | 57,257 | 43,859 |

Deferred income consists of 2024 subscription income paid in advance.

For the year ended 31 December 2023**16a Analysis of net assets between funds (current year)**

| | Unrestricted £ | Restricted £ | Total funds £ |
|---------------------------------------|-------------------|-----------------|------------------|
| Tangible fixed assets | 214,137 | – | 214,137 |
| Intangible fixed assets | 12,500 | – | 12,500 |
| Investments | 1,821,091 | – | 1,821,091 |
| Net current assets | 167,700 | 99,246 | 266,946 |
| Net assets at 31 December 2023 | 2,215,428 | 99,246 | 2,314,674 |

16b Analysis of net assets between funds (prior year)

| | Unrestricted £ | Restricted £ | Total funds £ |
|---------------------------------------|-------------------|-----------------|------------------|
| Tangible fixed assets | 216,835 | – | 216,835 |
| Intangible fixed assets | – | – | – |
| Investments | 1,696,976 | 65,560 | 1,762,536 |
| Net current assets | 398,302 | – | 398,302 |
| Net assets at 31 December 2022 | 2,312,113 | 65,560 | 2,377,673 |

17a Movements in funds (current year)

| | At 1 January 2023 £ | Income & gains £ | Expenditure & losses £ | Transfers £ | At 31 December 2023 £ |
|-------------------------------|------------------------------|------------------------|------------------------------|----------------|--------------------------------|
| Restricted Funds | – | – | – | – | – |
| ISMOR | 14,600 | – | – | – | 14,600 |
| May Hicks | 47,856 | 536 | – | – | 48,392 |
| MISTA | – | 36,254 | – | – | 36,254 |
| Total Restricted Funds | 62,456 | 36,790 | – | – | 99,246 |
| Unrestricted Funds | 2,315,217 | 1,458,053 | (1,557,842) | – | 2,215,428 |
| Total funds | 2,377,673 | 1,494,843 | (1,557,842) | – | 2,314,674 |

The narrative to explain the purpose of the restricted fund is given at the foot of the note below.

17b Movements in funds (prior year)

| | At 1 January 2022 £ | Income & gains £ | Expenditure & losses £ | Transfers £ | At 31 December 2022 £ |
|---------------------------|------------------------------|------------------------|------------------------------|----------------|--------------------------------|
| Restricted Funds | 73,348 | 2,565 | (13,457) | – | 62,456 |
| Unrestricted Funds | 2,577,965 | 1,251,040 | (1,513,788) | – | 2,315,217 |
| Total funds | 2,651,313 | 1,253,605 | (1,527,245) | – | 2,377,673 |

Restricted Funds

Consists of 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. It also includes an amount received from the ISMOR (International Symposium on Military OR) trust of £14,600 to be used to fund ISMOR scholarships and an amount of £36,254 transferred from Multidisciplinary in Scheduling: Theory and Applications (MISTA) to be used for scheduling MISTA activity into ORS events and conferences.

18 Operating lease commitments payable as a lessee

The charity's total future minimum lease payments under operating leases is as follows for each of the following periods

| | Leasehold Property Service Charge | | Equipment | |
|--------------------|--------------------------------------|----------------|---------------|---------------|
| | 2023 £ | 2022 £ | 2023 £ | 2022 £ |
| Less than one year | 3,030 | 3,030 | 5,435 | 5,548 |
| One to five years | 12,120 | 12,120 | 11,224 | 8,390 |
| Over five years | 245,430 | 248,460 | – | – |
| | 260,580 | 263,610 | 16,659 | 13,938 |

19 Legal status of the charity

The Society is a company limited by guarantee, has no share capital and is a registered charity. The objectives of the Society are the advancement of knowledge and education in operational research.

The liability of each member in the event of a winding-up is limited to £1.