

Lloyd's Register Foundation

Annual report and financial statements 30 June 2019

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Connecting science, safety and society

Trustees' Report incorporating the Strategic Report

Chairman's Statement

This year marks the culmination of the Foundation's first five years as an independent global charity and I am immensely proud of what we have achieved in such a short time. Our grant portfolio now exceeds £120 million, delivering real impact to society through research, education, and the acceleration of emerging technologies.

We must build on this, and ask how the Foundation can become a global leader, bringing together organisations who share our mission, and working alongside Lloyd's Register Group to enhance safety and advance public education in society within the transportation industries and other engineering and technological disciplines.

To do this, the Foundation has developed an ambitious new strategy that will enable us to have greater impact than ever before. We plan to focus our efforts on the most pressing safety challenges such as safety at sea, food safety, and the public understanding of risk. As a member of Friends of Ocean Action, I'm excited by our commitment to ocean safety and sustainability, and we will be working with partners to bring about real change in this area.

Partnerships and collaboration is one of the keys to achieving our social mission. Global challenges need global solutions and cannot be tackled by working alone. Going forward, the Foundation will develop its communications, tirelessly promoting the issues, and seeking out willing collaborators who share our deepest values and strong social purpose.

Diversity is also critical to delivering our strategy and mission. The Trustees continue to promote diversity and inclusion, recognising that the experiences and expertise that come from a diverse workforce can only benefit our organisation. Celebrating our differences is an important part of our culture.

I would like to thank my fellow Trustees for their support, enthusiasm and commitment to strong governance throughout the year. I take great pleasure in welcoming Ishbel Macpherson whose expertise and wisdom will help guide the Foundation as it embarks on this new strategy.

Finally, on behalf of the Trustees, my warmest thanks go to the Foundation's Chief Executive Richard Clegg and the Foundation staff who have achieved so much in just five years.

Thomas Thune Andersen

Chairman, Lloyd's Register Foundation

Foundation Chief Executive's Review

This year marks a milestone for the Foundation. It's witnessed the culmination of the Foundation's first 5-Year strategy since we came into being as an independent global charity possessing a unique governance structure in 2013. In that (short) history I'm immensely proud of what we've achieved.

From the beginning we've had in place a clear strategy of what we want to achieve. We also have the guiding principle that grant giving, however well intentioned, can fall short if based on assumptions that are wrong, or if operational delivery lets them down. That's why we've paid equal attention to our internal processes as well as external grant giving.

Such efficiency, alongside talking to and learning from other similar charities, has helped us keep our overhead and governance costs comparatively low when benchmarked against others in the sector. Not only does that help in increasing the amount of our resources available for charitable activity, it also contributes towards maximising our impact on society. A double benefit.

In 2019 the Foundation's awarded new grant commitments of £7.7 million, down on the previous year's figure of £23.9 million. However, our direct charitable expenditure (the philanthropic activities the Foundation engages in directly, rather than by making grants to grantees) is steadily increasing. One example of this is the significant investment we're making in widening access to our maritime heritage collection of 1.25 million documents, by cataloguing, digitising and making them freely available on the web as a unique historical and educational resource. So far this year we've digitised around 200,000 such records.

New grants commitments in year is one metric by which to gauge the Foundation. We're also in a fortunate position due to our unique governance structure and endowment, that we can afford to take the long view. Consequently, some of our significant grants can be worth over £10 million extending over 5-10 years. Our grants portfolio under management thus currently exceeds £120 million and is increasing. Working with our grants community on managing this portfolio and driving it towards impact, is a growing body of work and something we take seriously.

At the end of the day it is mission focussed outcomes and impact that drive us. We have a clear impact framework in operation and are careful to see that all our grants have a plausible pathway to application from the outset. We believe that the best way to demonstrate impact is through case studies – real world, practical examples of where we have demonstrably added value. In 2019 we published our first set of impact stories on postcards and are looking to add to them as well as translate them into other languages and formats such as short videos. The wish of the Foundation is to be known for who we are and what we stand for, and the impact we're making in the world. Telling our story helps bring the Foundation to life and further helps in attracting partners who share our deep values and purpose.

The past year has been full of new frontiers. The Foresight Reports and Insight Reports we publish serve as a mechanism for bringing together some of the best minds in the world to understand emerging technologies and trends. Not only do they serve as due diligence for our own grant decision making, they're also invaluable for others to build on. In 2019 we initiated foresight related work on subjects including future engineering uses of the sea, the future of regulation, and food safety. We look forward in the year ahead translating these into programmes of work.

I mentioned in my first paragraph that this has been a milestone year for the Foundation with the culmination of its first 5 Year strategy. In March this year the Board of Trustees endorsed the next step in the journey with our refreshed strategy to 2025. In that we're heightening our focus on becoming challenge-led and evidence-driven. Next year we're looking forward to launching what these challenges will be and also building in-house our new Evidence and Insight Centre.

The success of the Foundation belongs to everybody including our grants community and colleagues in Lloyd's Register Group who work hard to support us. We're also indebted to our Advisory Council members who challenge our thinking and present us with fresh opportunities and ideas. I particularly also want to thank our Trustees who give their time and much more pro bono.

Professor Richard Clegg FREng, FRSC
Chief Executive, Lloyd's Register Foundation

MISSION, VISION, STRATEGY

Our strategy sets out how we will achieve our vision

Our mission

To secure for the benefit of the community high technical standards of design, manufacture, construction, maintenance, operation and performance for the purpose of enhancing the safety of life and property at sea, on land and in the air.

The advancement of public education including within the transportation industries and any other engineering and technological disciplines.

Our vision

Our vision is to be known worldwide as a leading supporter of engineering-related research, training and education that makes a real difference in improving the safety of the critical infrastructure on which modern society relies. In support of this, we promote scientific excellence and act as a catalyst working with others to achieve maximum impact.

Strategic themes:

1 Supporting excellent scientific research



2 Accelerating the application of research



3 Promoting safety and public understanding of risk



4 Promoting advancement of skills and education



Objectives:

- Striving for excellence and impact
- Promoting technology foresight
- Building world-class research teams

- Accelerating technology uptake
- Informing standards and policy
- Facilitating the mobility of researchers

- Promoting the safety of life, property and the environment
- Enhancing public understanding of risk
- Maintaining and promoting a memory bank of safety and risk management developments

- Inspiring the next generation
- Enhancing the knowledge and skills of the workforce
- Widening access to disadvantaged and under-represented communities

Funding priorities:

- Structural integrity and systems performance
- Resilience engineering
- Human and social factors
- Emergent technologies

- Supporting safety organisations
- Communication and public debate of scientific research
- Developing the Foundation's Heritage and Education Centre library and archive

- Pre-university education
- University education
- Vocational training and professional development

Sectors we serve:

- | | | | |
|---------------------|--------------------------|--------------------------|------------------------|
| • Aerospace | • Food | • Manufacturing | • Oil and gas upstream |
| • Automotive | • Healthcare and medical | • Marine | • Power and utilities |
| • Built environment | • IT and communications | • Oil and gas downstream | • Rail and metro |

Strategic theme 1

Supporting excellent scientific research

Progress on what we set out to achieve

In our review of 2018 we set our plans to publish foresight reviews on the future of ocean engineering, the future of food safety, and initiate new activity informed by the Foundation's foresight and insight publications including on the safety of fishing and ferries. We have made progress towards publishing the reviews for others to build on and also using them ourselves to help inform our grant giving under our new challenge-led strategy.

Promoting scientific foresight

The foresight reviews published over the last year are the result of engaging with global networks that provided diverse views coalescing around core themes. The findings provide society with a view of the future and allow the Foundation to identify where it can have the greatest impact in pursuit of its charitable objects.

Future of Ocean Engineering Foresight Review

Workshops were held in Singapore, Southampton and St Johns, Canada engaging a wide range of experts to consider the future of ocean engineering. The review sets out a wide number of challenges and recommendations that will be published and used to inform the direction of our future programmes in 2020.

Future of Food Safety Foresight Review

The Foundation held events in Paris and San Diego, USA to discuss the future of food safety. The insights gathered so far were shared with the UN's Food & Agriculture Organisation (FAO) in Rome, where discussions centered on the development of technologies delivering blockchains, microbiomes and offshore sea farms. The review was launched at the FAO in September 2019.

Safety in Fishing Industry

Our insight report on the safety of fishing published in June 2018 identified three countries that had the highest fatality rates for fishers; one of these was the Philippines. A key recommendation emerged that in order to address the issues, one must first understand the unique challenges in specific countries and co-develop solutions with the local stakeholders, building coalitions that will support and sustain these initiatives into the long term. In response to this, the Foundation has supported the Fisheries and Marine Institute of the Memorial University of Newfoundland and the FISH Safety Foundation with a grant of £149,675 to collect baseline data on the current situation in the Philippines using stakeholder consultations and analysis of stakeholder data leading to the development of specific recommendations that address the challenges. The grant also aims to build a coalition of supporters who will pilot the recommended interventions.

Safety in Ferry Industry

Our insight report published in June 2018 used historical statistics to identify the Philippines as having one of the highest numbers of ferry fatalities; however, recent statistics indicate a rapid improvement with no lives lost in 2018. The Foundation funded a study due to report in October 2019 (value £41,400), conducted by the industry association Interferry, with the aim of understanding what safety enhancements worked and sharing lessons learned in other geographies.

National Structural Integrity Research Centre (NSIRC) – 5 years in

We are half way through our first major grant which has so far funded an equivalent of more than 48 years of PhD research in structural integrity. Of this sum, 45% of researchers are female which compares favourably against a UK average of less than 10% of female engineers working in industry.

Two notable student successes in the last year have been Madie Allen and Cui Er Seow. Madie won an open international competition by the US National Institute of Standards and Technology (NIST) for modelling residual stresses in an additively manufactured part. Cui was awarded best presenting author at the American Society of Mechanical Engineers

(ASME) conference on how her work on properties of additive manufactured parts is providing insights into new testing and manufacturing standards.

A significant number of these projects will underpin the standards, test methods and assurance tools used by society into the future.

Opening Access to research infrastructure

Globally, there are many excellent researchers who are unable to maximise the outputs of their work because they lack access to international research infrastructure. In the last year, the Foundation launched international calls with the aim of assisting researchers to gain access to resources that they would otherwise find inaccessible. The trial was, however, unsuccessful with very few applications received from target communities. We believe that our inability to reach target communities in developing economies prevented this initiative from achieving its aims. We are taking the lessons learned and strengthening our strategic communications and stakeholder engagement to understand how to reach future target audiences better.

Energy Storage

Our plans to initiate activity taking forwards the recommendations from our Energy Storage Foresight Review did not become a reality in 2018. It proved more difficult than we anticipated to engage with the community to identify an intervention where the Foundation could make a distinctive difference. However, we anticipate still using the findings in developing our challenge-led programmes within our new strategy in areas such as safety and sustainability.

Solid bulk cargo liquefaction: Strategies for effective control

Solid bulk cargo liquefaction in ships has been responsible for the loss of more than 100 seafarers' lives and nine bulk carriers in the last decade. This corresponds to 10% of recorded bulk carrier losses and 50% of fatalities, indicating the seriousness of vessel loss due to cargo liquefaction. An invitation to Southampton University to submit a proposal has galvanised the industry into an unprecedented collaboration. A plan of research, education, communication and new operational protocols has been co-developed with insurers, ship owners, mining companies, a regulator, a classification society, trade associations, lawyers, technology and engineering consultants, unions and charitable organisations that protect seafarers' safety. These improvements will lead to better awareness and operational controls to address the problem and save the loss of life and property.

Effective Crew Strategies

The Foundation supported research at Southampton Solent University to investigate the safety implications of different patterns of working for maritime crews. This was showcased at the International Maritime Organisation's Cross-Industry Conference on 31st January 2019. The work is available for others to build on and we will continue to observe for evidence of its application and impact.

Open-Access Journal in Data-Centric Engineering

Working in partnership with Cambridge University Press and the Alan Turing Institute, we supported the creation of a new, innovative open-access journal in the field of data-centric engineering, for publishing high-quality research that exploits data to inform the development of engineering systems and products in order to reduce risk, and to improve reliability, resilience, safety, efficiency and usability. Papers will be written by and for researchers beyond the usual academic communities to enable maximum impact. The Foundation's grant supports the open access aspects of the journal allowing this to be freely accessed by users who would otherwise not be able to afford access to high quality peer reviewed knowledge. They were awarded £250,000 over 5 years.

Seoul National University

The Foundation awarded a grant to Seoul National University, building on previous work. They will be developing innovative technologies in ship design with a particular focus on ship performance in waves and applications of new hull-form design. They were awarded £600,000 over 3 years.

Future plans

In 2019/20 we plan to:

- Consult on and publish foresight reviews on cyber security (which we deferred from our intended 2018 activities due to other priorities), space technologies, human factors and the future of regulation.
- Initiate activity in response to our new challenge-led strategy.
- Increase collaboration amongst our grant holders.

As part of producing our plans in these areas we will be developing metrics to gauge their impact and benefit to society.

Case Study: Data-centric engineering programme - Alan Turing Institute (ATI)

In 2015 we awarded a 5 year grant of £10 million to the Alan Turing Institute (ATI) to grow a new capability we named Data Centric Engineering ("DCE"). Its aim is to address the safety challenges that step changes in data-driven technology and artificial intelligence will create in engineering and industry. The programme aims to bring together world-leading academic institutions and major industrial partners from across the engineering sector to build collaborations and thus maximise impact.

2018/19 has seen a period of intense growth for the DCE programme. Over the last 12 months the programme grew from 30 programme researchers to more than 80, from 20 active projects to over 40, and brought in £13 million of new funding leveraged off the investment made by the Foundation. The 3D printed Bridge project continues to impress with the overall project and ATI-led components being recognised through the award of a number of prestigious high profile international prizes. Likewise, the development of formal strategic partnerships with the London Mayor's Office, Shell, National Air Traffic Service, Rolls-Royce and many others are leading to a higher profile in the national and international press as well as on social media.

New Group Leaders were appointed from Rolls-Royce, Cambridge, UCL, and Queen Mary's University. The DCE international footprint is also developing apace with strategic partnerships in Australia building on the Foundation's Trading Group work on the Shell Prelude FLNG facility. Canada, with its massive scale federal and provincial government investment in artificial intelligence is another geography where DCE is establishing strategic partnerships.

As the programme has grown it has also formalised its processes and procedures, setting in place an impact framework, a reporting structure for programme leads, a new website and public seminar series, and a coordinated pipeline of new industry partners. As we move into the fourth official programme year, it is now looking at how to maximise impact, through an innovation and commercialisation plan, an international engagement strategy, and through significant new industry partnerships. The programme will also be preparing for a major international conference and the launch of a new DCE journal with Cambridge University Press to solidify this field as a vital new area of academic and industry interest.

Strategic theme 2

Accelerating the application of research

Progress on what we set out to achieve

Last year's review outlined our plans to launch major new programmes addressing the safety of complex systems and end of life decommissioning of high-hazard engineering assets in partnership with the Royal Academy of Engineering (RAEng), make the first awards under the Lloyd's Register Safety Accelerator Programme, starting demonstrator projects in the Assuring Autonomy International Programme, and initiate a programme in partnership with the National Cyber Security Centre to support board-level decision making on cyber security issues. Achievements against these plans are described below.

Highlights from our charitable activities and new grants

Partnerships with the Royal Academy of Engineering (RAEng)

Three new programmes totalling £15 million awarded in 2018 to the RAEng are now well underway with their initial development and delivery. The 'Safer Complex Industrial and Engineered Systems' programme has appointed Dame Judith Hackett as chair of its programme board. The 'Enhanced Safety in Decommissioning and End of Engineering Life' programme board met for the first time in late November and agreed a focus for the first year on major infrastructure decommissioning in the oil & gas and marine sectors. The programme will also commission an evidence base identifying the major global hotspots for waste across multiple sectors. Professor William Powrie (Southampton University) is chairing the board. The 'Developing Skills' programme was announced at the RAEng annual conference for its international engineering education programmes and stakeholders on 24th September 2018, with the RAEng issuing a call for expressions of interest during the conference. Professor Peter Goodhew has agreed to chair the programme board and will contribute with his expertise in engineering education. Calls for proposals were announced in early 2019 with a closing date of July 2019. The responses are currently being reviewed.

Maritime Blockchain Labs

Maritime Blockchain Labs (MBL), a BLOC (Blockchain Labs for Open Collaboration) initiative in which the Foundation is a founding partner, was announced as a member of Massachusetts Institute of Technology (MIT) newest Solve class. Solve is an MIT initiative that advances lasting solutions from tech entrepreneurs to address the world's most pressing problems. MBL was selected for its work on developing shipping emissions monitoring, reporting and verification solutions, which build upon the blockchain-based Marine Fuel Assurance prototype developed through the Foundation's grant funding. Our grant to MBL of £490,000 was awarded in April 2018.

Assuring Autonomy International Programme (AAIP)

In 2017 we awarded a £10 million grant to York University in the field of assuring autonomy. In its first 18 months the AAIP programme has rapidly established itself. It has focused on five key areas: demonstrator projects; foundational research; international community building; education and training; and public engagement. With nine international demonstrators underway, research on dynamic risk assessment, an international community that includes visiting industrial fellows that share real world problems and solutions, user-inspired training for senior leader through to systems engineers, and public outreach through articles in *The Conversation* and *New Stateman*, the programme is leading in an area that has previously been under-recognised.

The AAIP programme's influence is also growing. Programme Director, Prof John McDermid, chairs the BSI's Centre for Autonomous Vehicles Advisory Board and has presented to the All-Party Parliamentary Group on Artificial Intelligence. Programme manager Anna MacIntosh has been an invited panellist in Washington DC on AI policy with the UK Office for AI. The programme's relevance and importance has been acknowledged through the awarding of £10 million from the UK Research Partnership Investment Fund (UKRPIF) enabling an expansion of the programme's capability and capacity.

Sharing engineering data for the public good

In November 2018 the Foundation awarded a grant of £99,337 with the Open Data Institute (ODI) to investigate ways of sharing engineering data in industry and business for public good. Prof Richard Clegg and Prof Sir Nigel Shadbolt (Lead author of our Big Data Foresight Review) shared the stage at the Open Data Institute summit in November 2018 to announce a new initiative using shared and open data to improve safety in our built infrastructure and across society. ODI and Lloyd's Register Foundation will collaborate together with a range of engineering and safety organisations across the UK, to identify how increasing access to data can help inform engineering design, monitor safety, and improve operations of key infrastructure.

Fullagar Technologies Ltd

A proportion of our funding for the NSIRC (National Structural Integrity Research Centre) programme awarded to The Welding Institute (TWI) in 2014 has been set aside for the accelerating research to application; in this case the commercialisation of safety enabling technology is happening through a joint venture between TWI and Lloyd's Register Business Assurance and Inspection Services. With seed funding from the Foundation, Fullagar Technologies is initially developing three products: one that can identify a serious form of cracking in pipelines; one that can cheaply monitor thickness reduction due to corrosion; and one that can prove the ongoing quality of electron beams used for joining and additive manufacture of critical components.

Next Generation Prediction Methodologies and Tools for System Safety Analysis

This story started when the Lloyd's Register Educational Trust awarded funding to Nottingham University to build a team researching methods for assessing dynamic (changing) risk in the rail industry. We took over that commitment when the Foundation was created in 2012 and since then have been working with Nottingham University on its direction and application. Ten years later, with Foundation support, the team has leveraged more than £6 million of additional funding from other sources and grown to 43 team members having a leading global reputation in dynamic risk assessment. The methodologies created have been openly disseminated but the Foundation is now supporting the development of the programme to include the nuclear, aerospace and other sectors. To maximise impact, Nottingham's methodology will be embedded in commercially available LR Group software called RiskSpectrum and made available to other interested parties.

HiLo

HiLo is a new not-for-profit organisation which works across the shipping industry to gain predictive insights through sharing operational data in a trusted way. Actions taken as a result of data sharing through HiLo has resulted in a 72% reduction in risk from lifeboat accidents, the risk of engine room fire reduced by 65%, and the risk of bunker spills by 25%. In total we have awarded £980,000 in grants to HiLo in two equal phases to establish their operating model. The final phase of £490,000 was awarded in July 2018.

Global Manufacturing & Industrialisation Summit (GMIS)

Globally, the development and introduction of the 4th Industrial Revolution (4IR) is accelerating. 4IR combines manufacturing and digitisation to provide multiple manufacturing benefits. Safety of those using the systems, of the systems themselves and the products have not received the focus necessary to understand or minimise risks. Working through the Global Manufacturing & Industrialisation Summit network, chaired by the UAE Ministry of Energy & Industry and the United Nations Industrial Development Organization (UNIDO), the Foundation is supporting the elevation of safety aspects to the attention of global leaders, directors of international companies and academics through the award of a grant of £249,650 to GMIS in December 2018.

Discovering Safety's first pilot study reports back

In 2017 the Foundation awarded a £10 million grant to UK Health and Safety Executive (HSE) to create The Discovering Safety programme. Its aim is to explore and unlock the value within the UK Health & Safety Executive's accident and incident data repository. The first pilot study completed during the year was on the topic of industrial 'loss of containment'. The results provide confidence that the data does contain valuable insight, but also shows how there may be better ways of collecting data that could unlock greater insight in the future.

SafetyTech

Digital technologies have enabled some sectors to advance rapidly, with FinTech and HealthTech industries as just two examples. There is no digital community that specifically focuses on safety and we believe that the creation of a SafetyTech community could significantly reduce the accidents that occur today. The Lloyd's Register Safety Accelerator is an important step in the creation of this community, but to bring people into this space it is important to indicate the

size of the market and multiple ways to engage and be recognised. We have been undertaking activity to understand better what is involved to create a SafetyTech community and what role we could play in making this happen. We will be considering taking this forward in our new Foundation strategy as a way of bringing multiple stakeholders together to grow investment in the safety-related market.

Resilience Shift

In 2016 we awarded a £10 million grant to Arup to establish the Resilience Shift (RS) programme. In 2018 four new grantees were appointed by RS to develop industry specific resilience primers. RS has worked on resilient water governance and developed and published a prototype of a digital tool, named WaterShare. Developed in partnership with the City Water Resilience Framework, SIWI (Stockholm International Water Institute) and OECD (Organisation for Economic Co-operation and Development), the tool specifically tackles the need for collaboration, for sharing information across departments, between levels of government and between critical sectors. After a global search, Dr Angela Wilkinson was announced as the new director for the RS.

Polar Shipping

In 2017 we awarded a £680,000 grant over 4 years to Aalto University in Finland to develop guidance notes on scenario-based risk management for polar shipping. It builds on previous Foundation funded research in arctic operations to significantly update recommended practice. It enables the International Maritime Organization (IMO), government agencies, class societies and industry to establish and maintain the highest standards of safety for shipping operations in the Polar areas.

Future plans

In 2019/2020 we will:

- Initiate activity towards establishing a SafetyTech community utilising the Foundation's unique position as thought leader and funder in this space.
- Our new challenge-led strategy that we are launching next year will continue to look for opportunities to accelerate the uptake and application of technology and good ideas.

Case Study: Lloyd's Register Safety Accelerator

The Lloyd's Register Safety Accelerator is a challenge-based accelerator programme, creating, facilitating and guiding collaboration between innovative digital startups and industry.

The Safety Accelerator is a joint initiative for public benefit between Lloyd's Register Foundation and the Lloyd's Register Group. The Safety Accelerator is run in partnership with Plug and Play Tech Centre, the largest, global innovation platform and most active venture capital fund in Silicon Valley. Our aim is to make the world a safer place, by encouraging the growth of the SafetyTech industry and accelerating the adoption of digital technology for safety.

Each quarter, the Lloyd's Register Safety Accelerator calls for applications from startups to help solve critical safety challenges set in conjunction with leading industry corporations. Successful startups receive trial funding from the Safety Accelerator to pilot their solution with the industry challenge partner and receive access to domain expertise, mentoring and entrepreneurial support to help bring their solutions to market.

In its first year the Safety Accelerator has completed four rounds supporting innovators by bringing together industry problem owners with startups possessing solutions. These are: looking at human safety on board ships; detection and management of infrastructure risks; risk detection; and data analytics applications. Example challenges include tracing food allergens, early pre fire heat detection systems on vehicle-carrying ships, and early leak detection on Liquefied Natural Gas ("LNG") ships.

Building on the success of the Safety Accelerator, work has started on investigating whether and how to establish a 'SafetyTech' community of innovators in safety. This work will include a market estimation, led by Gartner, of the value of safety technologies.

Strategic theme 3

Promoting safety and public understanding of risk

Progress on what we set out to achieve

Our plans for 2018/2019 included:

- Scope and publish a foresight review on cyber and safety.
- Revisit our community to establish if our known global safety challenges are up-to-date.
- Act on the recommendations of our Global Safety Evidence Foresight Review.
- Foster innovation in safety data sourcing and analysis.

During this year we did not publish the Cybersecurity Foresight Review as planned due to unforeseeable delays. This review is now underway and will be published in the coming year. Similarly, rather than repeating our survey to establish if our global safety challenges are up-to-date, we recognised that there is still a lot of work to do in addressing many of the challenges that we have already identified. Consequently, we have focused on the design and delivery of programmes in this area and on recruiting a director for our new Evidence and Insight Centre, who will lead the response to our Global Safety Evidence Foresight Review. In addition, we have worked hard to develop a huge programme with Gallup that will be the world's biggest source of data on public perception of risk.

Highlights from our charitable activities and new grants

Gallup

Working with Gallup, we have commissioned the world's first poll, called the World Risk Poll, on people's attitudes and experiences concerning safety in their everyday lives. It is the world's largest study into how people around the world think and feel about risk and safety, including at work. It surveys over 140,000 people from more than 140 countries to understand better how to improve our understanding of risk and make the world a safer place. It will produce the first ever globally comparable, publicly available data set on the public understanding of risk. The Gallup World Risk poll will be undertaken four times over the next eight years with the first results being published in July 2020.

Public Understanding of Risk in Asia

Delays in the recruitment of a director of our Institute for the Public Understanding of Risk continued to delay operational activity; however, we are delighted that Professor Koh Chan Ghee has been appointed to lead the multi-disciplinary team at the Institute, based at the National University of Singapore, which officially launched in June 2019. The Institute aims to change the way we question, examine and understand risk issues and will help us to improve lives by transforming the risk communication landscape and better the public understanding of risk.

Sharing engineering data for the public good

Through the Open Data Institute (ODI) we are engaging with the business and industry community to identify, from a safety perspective, the benefits of sharing engineering data. By "*sharing data*", we mean increasing access to data in ways that protect privacy, retains trust and respects commercial confidentiality. ODI's work will also explore models for data sharing (such as Data Trusts) and which of these have the greatest chance of success within industry sectors.

Reaching around the world

In August 2015 we awarded a four year grant to The Conversation of £180,000 to provide support for a science editor. The outcome has led to 709 articles that were read by a global audience of more than 35.5 million readers. Our funding also allowed the paid employment of three interns, one of whom has now been taken on as a full-time member of staff.

Seafarers International Research Centre

In July 2018 we awarded a two year grant of £250,000 to the Seafarers International Research Centre (SIRC) in Cardiff. This has led to the production of a video and accompanying guidance to improve communications and interactions between ship-based and shore-based personnel, which is already being used by 28 shipping companies.

Safety culture at sea

In October 2018 we extended our support of the CHIRP (Aviation and Maritime Confidential Incident Reporting) maritime programme with a grant of £150,000 over 3 years. It is growing in reputation and influence through its provision of a free, confidential service to report near misses and hazardous occurrences at sea. Lessons learnt are shared with a minimum of 250,000 seafarers every three months.

Saving Lives at Sea

Our continued support for the RNLI's (Royal National Lifeboat Institution) training of their volunteer crews teaches the vital skills they need to rescue those in danger, whilst keeping themselves and their fellow crew members safe. In 2018, 250 crew members from 120 lifeboat stations around the coasts of the UK and Ireland completed their training. Crew members from these stations launched a total of 5,167 times in 2018, aiding 5,427 people. During these launches, 113 lives were saved. In 2016 we awarded a five year grant to RNLI of £1,059,000.

Risk communication

We know that the rapid pace of scientific and technological development outstrips the ability of the public and policy-makers to engage with it meaningfully. We are working with the Royal Institution in the UK to see if we can establish a global multidisciplinary network that will inform and strengthen the most appropriate routes for international public engagement on new technologies and scientifically-based approaches for improving safety and quality of life. Initially this involves mapping likely stakeholders and having initial conversations with those that share our purpose.

The China Academy for Safety Science and Technology (CASST)

CASST has developed standards for emergency preparedness for industrial incidents, co-funded by the Foundation and including LR Group as part of the delivery team. The project has been endorsed at the highest levels in China and training in the use of the protocols is being rolled out to partner countries involved with the One Belt, One Road initiative, including Vietnam, Cambodia and Laos. The One Belt, One Road initiative is a global development strategy adopted by the Chinese government involving infrastructure development and investments in 152 countries and international organizations in Asia, Europe, Africa, the Middle East, and the Americas. To support our collaborations in China the Foundation is translating its foresight reviews into Chinese, starting with the Resilience Engineering and Public Understanding of Risk Foresight Reviews.

Future plans

In 2019/2020 we plan to:

- Initiate activity in response to our new challenge-led strategy. We anticipate programmes will include the following:
 - Better understanding the risks associated with emerging technologies, including complex, systemic risks.
 - Planning our response to the first World Risk Poll.
 - Public understanding of risk in Asia, where there is very little expertise in risks and the science of risk perception.
 - A curated network of technology and communication experts able to communicate risk better.
- Establishing our Evidence and Insight Centre to collect and analyse data around actual safety performance, exploiting new opportunities provided by new technologies, data collection methods and analytical technique. Strengthen our portfolio for improving the public understanding of risk. This will include support for the annual Huxley Summit, which will host 250 key leaders for a dialogue about the actual and perceived risks in emerging technologies that will support/replace society's critical infrastructure.

Case Study - World Risk Poll

In September 2018 we awarded a 6 month grant to Gallup for £249,000 to design and trial a survey questionnaire on global public attitudes to risk and safety, and test it in eight different countries. The aim is to explore how people around the world understand risk, and how those perceptions affect their decision making process on matters relating to their safety and well-being. The questionnaire development and testing was successful and the Foundation has now decided to implement the research globally, with the resulting dataset (140,000 people over 140 countries) being provided as a global public good to support researchers, policy makers and other interested stakeholders make better informed data-driven policies and interventions.

For the next next phase of the work with Gallup, the Foundation has entered into a contract valued at £14.0 million to repeat the World Risk Poll four times over eight years and interpret and publish the results. The resultant global dataset will provide unique insights into public attitudes and understanding of risk in everyday lives, which we will be making openly and freely available.

Working with the team at Gallup, we are creating a communications plan for 2019-20 to launch the World Risk Poll engaging the public, researchers, and other stakeholders. The first event was a London-based launch of the project in June 2019 based on the publication of the first two outputs: the questionnaire survey report and the compendium of risk data. The publication of the first iteration of the World Risk Poll is planned in July 2020.

Strategic theme 4

Promoting advancement of skills and education

Progress on what we set out to achieve

Our plans in 2018/2019 included:

- Deliver an investment appraisal for putting our heritage collection to work as a unique historical and educational resource.
- Initiate a major new programme in partnership with the Royal Academy of Engineering.
- Inspire more young people towards engineering.
- Publish skills and education insight reports to help inform the direction of our future activities.

In 2018/19 we have fulfilled our intention to produce an investment appraisal for the Lloyd's Register Foundation Heritage and Education Centre (HEC), focusing on a new vision and ways in which the unique Lloyd's Register historical collection and archive can help us address our mission. In addition, we have directed a new Makerspace-based approach to understanding better how we can inspire more young people towards engineering. Whilst we have not yet produced any skills and education insight reports, we have progressed our plans and have worked with the UCL Centre for Engineering Education to publish *Innovations in Engineering Education; Inspiring and Preparing Our Engineers for the 21st Century*, which we launched in February. Finally, we have also initiated work with the RAEng to review world data on the provision of engineering skills and education to identify any significant gaps linked to LRF's safety mission.

Highlights from our charitable activities and new grants

Enthusiasm for Engineering

In the UK we are funding 20 ENTHUSE partnerships across the UK, to stimulate and sustain young people's interest and enthusiasm for engineering through a £300,000 grant over 2 years awarded in November 2018. Led by STEM Learning, the funding enables groups of four to eight schools and colleges to work together in partnerships to identify and address issues with participation and achievement in engineering and technology. We aim to create a community of teachers with cutting-edge technical and pedagogical understanding in engineering and emerging technologies who are well connected to local employers within the engineering sector, who are able to deliver a quality engineering education programme. Teachers and schools are being provided with expert in-school guidance, mentoring, and CPD based upon our emerging technology areas and other forms of support. To date, the partnerships have already recruited 85 schools and colleges across the UK and engaged nearly 100 employers, including Arup, the Ministry of Defence and Siemens.

Reimagining Engineering Education

In February 2019, the Foundation helped to launch *Innovations in Engineering Education*, a report led by the Centre for Engineering Education at UCL that considers 21st century engineering, how it can be taught and how we get more people to do it. The aim is for the insights in the paper to be adopted and used by deliverers of engineering education to attract a more diverse generation towards STEM (science, technology, engineering and mathematics) subjects. The value of the grant was £55,000 with UCL's Centre for Engineering Education.

Makerspaces

To achieve the Foundation's mission, we recognise the importance of increasing the numbers and diversity of those within engineering professions. We recognise a unique opportunity for maximising the potential of Makerspaces as a vehicle for widening participation in engineering and are funding two new programmes in this area. One will be led by Professor Louise Archer (Institute of Education, UCL) through a three year grant of £688,000 awarded in June 2019, and the other will be with the Educational Volunteers Foundation of Turkey (TEGV) also through a three year grant of £201,000 awarded in May 2019. The programmes will be mutually beneficial and will produce valuable evidence of the teaching and engagement approaches that work in Makerspace settings. Makerspaces, sometimes also referred to as hackerspaces, hackspaces, and fablabs are creative, DIY spaces where people can gather to create, invent, and learn.

Improving Safety Culture

We are delighted to be supporting the Hellenic Marine Protection Agency (HELMEPA) in a new project that aims to strengthen maritime safety culture among seafarers, shipping companies and other marine communities of Greece and Cyprus through the establishment of a voluntary reporting scheme for near misses by all types of vessels, a series of refresher training seminars and simulation on incident analysis, "safety-at-sea" workshops and a wide safety awareness campaign. In June 2019 we awarded a 3 year grant of £288,000 to HELMEPA in support of this work.

Data Skills for 21st Century Engineering

We are building on the success of our data-centric engineering programme at the Alan Turing Institute (ATI) and working with Imperial College and ATI on a programme that aims to train the next-generation of engineers, leaders, and influencers with the data skills to transform safety, reliability, and efficiency of critical infrastructure.

Saving Lives in South East Asia

The South East Asia Skills Enhancement Programme (SEASEP, formerly SEATP) is a skills initiative that aims to drive down the rate of fatal occupational accidents in SE Asia, and so contribute to saving more than 100,000 lives per year. Since launching in October 2018, through a 3 year grant of £2 million with TWI, the programme has already recruited 300 students across 7 locations in Indonesia, and ten Memoranda of Understanding have been signed with industry, training providers and other agents. The Indian phase of the programme started in April 2019.

Tall Ships Youth Trust

We recognise the life-changing experience that Tall Ships Youth Trust voyages can bring to so many young people. That is why we are very proud of our support for their 'STEM and the Sea' programme through a £126,000 grant over 3 years awarded in September 2018. Our funding will allow 90 disadvantaged young people to go on voyages that will offer a rich science/engineering-based educational environment designed both to create aspiration towards marine engineering and develop personal/employability skills. The STEM and the Sea voyages also build on an existing collaboration between the Foundation and the 1851 Trust, furthering its potential for impact.

Individuals that can Change the World

We have a 'family' of grants that aim to provide highly-talented individuals from emerging economies with the training they need to make the world a safer place. At the International Maritime Law Institute (IMLI) based in Malta, we fund postgraduate students from developing states to gain unique legal expertise that makes them a valuable resource to policy and decision-makers in their governments. The three most recent Lloyd's Register Foundation scholars now hold senior positions within the Gambian judiciary, the Ministry for Foreign Affairs in Guyana and Kenya's Ministry of Transport. Similarly, a new grant to the University of Manchester (value £38,000) will provide scholarships for graduates from Rwanda, Uganda, Ethiopia or Tanzania to obtain much needed high-level engineering skills and prepare them to apply their knowledge to the communities in which they live and work.

Contemporary impact of our rich heritage

The Lloyd's Register Foundation Heritage and Education Centre (HEC) is the custodian of Lloyd's Register's unique heritage collection, which contains more than 250 years of ship plans, survey reports, letter books, photograph collections and so much more. The collection is one of the great resources still available for maritime history, marine engineering, naval architecture, offshore engineering and ocean technology. This year we have shown how our collection can be put it to work in line with our charitable mission and have set a goal for HEC to be "a globally-renowned resource for understanding engineering and technological innovation and its impact on society." To do this we are building on the collection's historical links to the marine sector and our safety-driven mission. We have already embarked upon an ambitious programme to catalogue, conserve, digitise and make the entire collection publicly available within three years and we are pursuing new and engaging programmes of outreach, education and research.

Future plans

In 2019/20 we plan to:

- Initiate activity in response to our new challenge-led strategy.
- Start building the global evidence base to help identify where engineering capacity and capability to address safety challenges is most lacking – and work with others to establish if education and training matches current and future industry needs.
- Support new approaches to engineering education that inspire and engage participation of disadvantaged and under-represented communities.
- Build public awareness and understanding of the importance of engineering education.

Case study – International Maritime Law Institute

The International Maritime Law Institute (IMLI) based in Malta was founded in 1988 and is a world recognised centre for the training of specialists in international maritime law. In fact, in December 2018, the United Nations General Assembly recognised for the eleventh consecutive time the importance of IMLI as a centre of education and training of specialist in maritime law.

Lloyd's Register Foundation appreciates the importance of training and equipping young maritime lawyers to help their respective national maritime administrations translate International Maritime Organisation (IMO) conventions and treaties into national legal legislation and to help with their consistent enforcement. It is vital to the effective regulation of national and international shipping for IMO treaties and conventions to be implemented clearly and consistently via national laws of individual flag States. This makes the world a safer place.

Consequently, the Foundation is enormously proud of its long-standing support to IMLI, which actually stretches back to 1992, when Lloyd's Register donated some computer hardware for the use of IMLI students and staff and the first Lloyd's Register Computer Room at IMLI was opened.

Since 2002-2003 Lloyd's Register, and now Lloyd's Register Foundation, has supported IMLI through scholarships for students from emerging economies. Indeed, IMLI is establishing a formidable network of professionals – from registrar generals to chiefs of naval departments, and from ministerial positions to IMLI staff - who are rendering valuable services to our society.

We are honoured to maintain relationships with the IMLI graduates that we have supported, and we are delighted that Aleksandra Bujković, recently admitted to the Bar Chamber of Montenegro, is one of Lloyd's Register Foundation's 100A1 Ambassadors.

Foundation Financial Review and Policies

Lloyd's Register Foundation (the Foundation) generates its income from the investments that it holds.

These fall into two categories:

- Financial investments: a portfolio of listed investments; and
- A Social Investment: 100% ownership of the unlisted shares in the immediate subsidiary company Lloyd's Register Group Limited ("LRG").

The Trustees consider that the policies outlined in this section constitute the framework for their key financial risk management policies.

Results for the year

The Foundation had total income of £10.4m (2018: £10.3m) for the year consisting of income from its listed investments.

Investment income of £10.4m (2018: £10.3m) comprised £nil (2018: £0.1m) of donations from the Trading Group and £10.4m (2018: £10.2m) of income from the return on the investment portfolio.

There was no gift aid paid by the Trading Group in 2018/19. As the Foundation holds sufficient levels of unrestricted funds to be able to continue its immediate planned grant making activity, the Trustees agreed that the profits generated by the Trading Group in 2018/19 should be reinvested to secure long term growth and increased profitability in the future rather than paid to the Foundation as a Gift Aid return on investment.

The Foundation had total expenditure of £17.4m (2018: £28.6m). The decrease in expenditure arose from a lower value of grants awarded during 2018/19 in comparison to the prior year.

Lloyd's Register Foundation

	2019	2018
	£m	£m
Gift aid from Trading Group	—	0.1
Income from listed investments and other resources	10.4	10.2
Total income	10.4	10.3
Investment management costs	(0.9)	(0.9)
Charitable activity costs	(16.5)	(27.7)
Total expenditure	(17.4)	(28.6)
Net gains on listed investments	13.9	3.4
Net income / (expenditure) and net movement in funds	6.9	(14.9)

Charitable expenditure of £16.5m (2018: £27.7m) principally relates to grants of £11.7m (2018: £26.0m) which are discussed further in the Trustees' Report.

The Group Financial Review can be found on pages 45 to 46 and forms part of this Strategic Report.

Subsidiaries: Social Investment

The Foundation has one direct, wholly-owned subsidiary company: Lloyd's Register Group (LRG).

LRG is itself the head of a global trading group of companies with over 250 years of history, focused on adding value to society through independent assurance and expert advice for clients who own, operate, design and build the critical infrastructure upon which society relies. The profits generated by the Trading Group help fund the public benefit activities of the Foundation. The Trading Group carries out a mix of charity-related and non-charitable activities globally. The Charities (Protection and Social Investment) Act 2016 ("the Act") sets out a general power for Trustees to make social investments (pursuing both a financial and social return). This effectively enshrines in legislation the basis for mixed-motive investment. The extent to which public benefit is delivered by the work of the Trading Group forms part of the Trustees' assessment of the return on their investment.

The Trading Group's trading operations include many activities which are of a public benefit nature, aligned to the Foundation's mission of securing high technical standards of design, manufacture, construction, maintenance, operation and performance and to advance engineering-related public education.

The Trading Group's Marine & Offshore business includes the safety inspection of 7,088 ships each year and the ongoing development of Rules for their safe construction, maintenance and disposal. For example, the Group's Marine business has helped the International Maritime Organisation to devise international safety standards such as the Ballast Water Management Convention and helped the International Labour Organisation devise the Maritime Labour Convention. Following its input into the creation of these internationally recognised safety standards, the Trading Group then performs design approvals, surveys and audits to verify its customers' assets comply with these requirements.

The Group's Energy business includes verifying the safe design and operation of rigs, platforms, Floating Production Storage and Offloading Installations ("FPSOs") and refineries. The Group also inspects boilers, pressure vessels and other land-based installations for safety-related purposes together with developing Rules for those assets in the same way as described for ships in Marine. The Group's Energy consultancy business primarily deals with safety case preparation for offshore exploration and nuclear power generation.

The Business Assurance and Inspection Services business includes the Trading Group's CE marking activity helping to assure the safety of a range of consumer products. As the only supplier of management system certification to the major UK nuclear sites its contribution to nuclear safety for society is also significant. In addition, the Trading Group devotes significant effort and resources to helping other standards-setting bodies to devise new or improved safety standards as well as auditing and providing advice relating to ISO 14001 certification.

Overall, the Trading Group's activities include considerable investment in furthering the understanding of technology through research conducted by the Marine & Offshore and Energy businesses and through a focus on 'Data and digital innovation' as one of its five core areas of business development. Typical areas of research include: advance materials; propulsion and powering; energy production and storage; robotics; marine biotechnology; and autonomous systems. Since January 2016, the Trading Group has established key strategic relationships based around important digital capabilities and areas of focus for growth through investment or collaboration. This emphasis on research and data and digital innovation directly benefits public understanding of technology and means that when technology is deployed it is safe, suitable and dependable and therefore safe for society in its application.

The Trustees base their expectations of future financial return from the Foundation's investment in the Trading Group on quarterly reports to their board meetings and an annual five-year plan review from the executive leadership of the Trading Group. The performance of this unlisted investment is considered in the 'Investment performance: Social Investment' section.

Funds

In September 2012, the Trading Group transferred £206.4m of assets to the Foundation as an expendable endowment. The Trustees have the power to convert the capital within the fund to income and expend such amounts converted on the Foundation's objectives as they see fit. £100.0m of the endowment can only be converted to income from 1 July 2020 as discussed below in the reserves policy section.

Income generated from the assets held within the expendable endowment is shown in the Foundation's general fund, as it may be used in furtherance of the Foundation's charitable objectives.

Capital returns on the assets held within the expendable endowment are retained within the endowment and form part of the endowment into the future, subject to the same rules as the existing endowment funds.

Reserves policy

The Trustees review the Foundation's reserves policy on an ongoing basis and at least each financial year.

The Foundation's reserves underpin its long-term financial viability. The Foundation (charity only) has total reserves of £299m of which £276m is held in an expendable endowment as at 30 June 2019.

The level of general funds is maintained to facilitate meeting the medium-term overhead costs, forecast grant awards and direct charitable activities. The general reserves include the Foundation's £40m investment in LRG held at cost. This Social Investment is integral to the Foundation's ability to generate future income and to delivering its public benefit, as noted elsewhere in this Strategic Report. Grant commitments approved and communicated to grantees to be claimed in future periods are also included in the general reserves fund. The Trustees have considered the Foundation's level of general reserves. The Foundation does not currently have large overheads and, in general, is able to rely on recurring income from its endowment and from the Trading Group. For that reason, the Trustees do not currently consider that the charity has a need to hold other funds as general reserves.

The target for the expendable endowment is to maintain the real value of the initial £206m donation received from the Trading Group following the establishment of the Foundation in 2012.

However, should the Trustees consider there be a shortfall in the general funds, part of the expendable endowment could be used to continue to meet the Foundation's short-term plans while the long-term reserve policy is reviewed. The original terms of the expendable endowment contained a condition that the Foundation must retain £100.0m of that sum until 1 July 2017 which has since been extended to 1 July 2020. During that period, there is a contractual obligation to transfer an amount not exceeding £100.0m to the Trading Group's UK defined benefit pension scheme should there be an insolvency event affecting the Trading Group.

Having reviewed the policy and the current reserves position, the Trustees consider the levels of reserves to be satisfactory.

Financial position

At 30 June 2019, the Foundation had unrestricted funds of £22.4m (2018: £27.2m). Of the £298.8m total funds, £40.1m is invested in the Trading Group.

Going concern

A review of financial performance and the Foundation's reserves position is set out above. In the opinion of the Trustees, the Foundation has adequate financial resources and is able to manage its business risks. The Foundation's planning process, including financial projections, has taken into consideration the current economic climate and its potential impact on the sources of income and planned expenditure. The Trustees have a reasonable expectation that the Foundation has adequate resources to continue in operational existence for the foreseeable future.

The Trustees believe that there are no material uncertainties that call into doubt the Foundation's ability to continue in operation. Accordingly, the Foundation's financial statements have been prepared on the basis that the charity is a going concern.

Grant-making policy

The Foundation has a formal governance structure for grant decision making. The Foundation can receive grant proposals and applications at any time. All proposals and applications are reviewed initially at its monthly grant applications meetings.

Donations above £2.0m must be approved by the board; Donations below £2.0m can be approved at the Grants Application Meeting (GAM), with the approval of the Grants and Direct Charitable Activities Committee Chair, or below £1.0m solely by the GAM.

Details of available funding and the application process are published on the Foundation's web site and notified on social media. Grant holders are required to submit staged reports as part of the process to track delivery against the agreed grant objectives, as well as to monitor the impact and public benefit being generated.

Investment policy

The Trustees have delegated decision making on investment matters relating to all assets except the investment in the Trading Group (reviewed directly by the Board of Trustees) to an Audit, Risk and Investment Committee, which is governed by an agreed Terms of Reference, in order to provide appropriate focus on the investment arrangements. Day-to-day investment choice is delegated to investment managers subject to defined tolerances relative to the respective benchmarks.

The Foundation's financial objective is to at least maintain the real value of the 2012 initial donation from the Trading Group of £206m, whilst generating a stable and sustainable return to meet the Foundation's objectives as laid down under its governing document.

The investment portfolios are a mix of unrestricted funds and an expendable endowment, the income from which serves to provide funds for the ongoing charitable work of the Foundation.

In this context, a number of portfolios exist, each of which has specific objectives.

The Foundation seeks to produce an optimum level of return within an acceptable level of risk. The current investment objective is to generate a return of inflation as defined by the Consumer Price Index ("CPI") which the government has set at a target rate of 2% per annum plus 3% per annum from the initial endowment over the long term. This, when combined with future profit distributions from the Trading Group, will enable the present and future financial requirements of the Foundation to be met whilst maintaining the real value of the initial donation. The Trustees review the performance of the Trading Group on a regular basis.

A set of measurable performance objectives has been developed for the investment managers and pooled funds. Performance in each asset category is compared quarterly with a suitable performance benchmark. The managers are expected to demonstrate skill in the management of their portfolios consistent with the performance objectives, given the level of risks adopted. Investment performance is considered three times a year by the Audit, Risk and Investment Committee.

Cash-based investments represent the Foundation's working capital, and as such are invested in a prudent manner with a secondary objective of achieving reasonable rates of return relative to the deposit market.

The Trustees are fully supportive of responsible investment as it aligns with the Foundation's aims to provide a benefit to society and is also central to long-term value creation. The Foundation's investment managers are required to adopt the same philosophy and we delegate day-to-day investment decisions to them. The Trustees regularly receive investment reports enabling them to monitor the investments and the managers' performance. We expect them to take an active interest in the management of the investee companies, engaging with management on issues of corporate governance and with regard to social, environmental or ethical considerations all of which impact shareholder value.

Investment performance: listed investments

During the year, the investments performed well, delivering a total return of 7.3% (2018: 4.2%). This comprised an annualised income yield of 3.1% (2018: 3.2%) and a capital yield of 4.2% (2018: 1.0%). The return on the endowment is higher than the long-term objective stated within the investment policy above.

Investment performance: Social Investment

The £44.0m of gift aid paid by the Trading Group in 2016/17 reflected a particularly strong profit performance in 2015/16 which was not repeated during the 2016/17 or 2017/18 financial years. As the Foundation held sufficient levels of unrestricted funds to be able to continue its immediate planned grant making activity, the Trustees agreed that profits generated by the Trading Group in 2016/17 to 2018/19 should be reinvested to secure long term growth and increased profitability in the future rather than paid to the Foundation as a Gift Aid return on investment.

Challenging markets - maintaining momentum

The Trading Group's core markets of marine and oil and gas have been impacted by geopolitical and economic uncertainty, including trade sanctions and evolving global supply chains. In common with other regulatory bodies, the Trading Group has had to review its status such that it can continue to support clients with their certifications against an uncertain Brexit outcome.

In maritime, whilst the downturn was not as severe as some were forecasting, the short-term outlook remains very volatile, influenced significantly by geo-political sanctions and a growing proportion of vessels leaving the supply market for modifications in shipyards, as preparations for the 1st January 2020 Global Sulphur limit on fuel oil accelerate. The Clarkson's index for Global Contracting Forecasts has an expectation that there will be a rise in outer years driven primarily by tankers and gas ships. Cruise ship demand is forecast to keep growing. Offshore vessel activity is expected to remain slow, however some rig re-activation is expected, and the production niche is expected to see some upturn.

Turbulence continues in the energy market as demand moves ahead of supply. Demand is rising year-on-year in India, though there is only modest demand recovery in the Middle East and there is increased risk in European economies should there be a disorderly Brexit.

The markets for the Trading Group's certification business continue to see low single digit growth reflecting demand for the main international standards, ISO9001 and ISO14001, with the final impact of the New Standards Transition being seen this year. The market for the customised Assurance business, particularly in food, continues to grow as does the cyber market.

Investing in our talent

Safety remains the Group's number one priority and we employ best practice to improve our record and look after our colleagues, clients' employees and others. At year end the Trading Group finalised its first 3-year Health and Safety improvement programme and achieved a 36% reduction in Lost Time Incidents. Over 35,000 hours of safety training were undertaken with a major global focus on Working Over Water.

Digital innovation

The Trading Group is working in close collaboration with its clients, subject matter experts and an increasing number of technology partners to develop its innovation portfolio. This approach continues to gain market traction and momentum with exciting new initiatives.

Integrated operating model – Simplified and aligned enterprise

Over the past 3 years the Trading Group has made significant investments in its enterprise architecture, simplifying and standardising the back office whilst also providing new tools and systems for to improve operational efficiency and delivering an improved experience for clients.

A new Enterprise Resource Planning (ERP) solution embracing people and finance systems has been at its heart aligning processes across all businesses with automation simplifying workflow from order to cash. The global rollout has been implemented in over 75 countries in two years.

Financial results

The summarised financial information of the consolidated Trading Group as disclosed in the Trading Group's consolidated financial statements for the year ended 30 June 2019 is provided in note 12 to the Foundation's financial statements. Further details of the financial performance of the Trading Group is included within the LRG's financial statements.

The Trustees are satisfied with the performance of the Trading Group, and will continue to maintain and develop its effective working relationship with the Trading Group. They will allow the Trading Group to retain funds for investment in operating improvements and potential acquisitions, but continue to expect cash distributions from the Trading Group.

Governance and management

The Foundation is governed by a Board of Trustees, which is responsible for setting the Foundation's strategy, operating with good governance and monitoring the fulfilment of the Foundation's objective – delivering public benefit.

The Board is currently made up of eight Trustees who are also the Members and Directors of the Foundation for Companies Act 2006 purposes. The Board considers Foundation policies, receives committee reports and recommendations, approves annual budgets, reviews the performance of the Trading Group, and guides the Foundation Chief Executive.

Thomas Thune Andersen, Chairman

Thomas is the Chairman of the Lloyd's Register Foundation and Chairman of Lloyd's Register Group Limited. He is a member of the Foundation's Nominations Committee and the Lloyd's Register Group Limited Remuneration Committee. Thomas, a former member of the executive Board of the A.P. Moller-Maersk Group with more than 30 years tenure in its maritime and energy sectors, was appointed to the Board of the former Lloyd's Register in June 2010. Thomas is Chairman of Ørsted A/S, Vice Chairman of VKR Holding, the parent group of Velux and a Non-Executive Director of IMI plc and BW Group Limited. He is member of the World Economic Forum Chairmen's Council.

Sir Brian Bender

Brian retired from the Civil Service in 2009, having been a Permanent Secretary for nearly 10 years. His final position was at the Department for Business, having served previously at DEFRA. He is Chairman of the London Metal Exchange, Chairman of Water UK and a non-executive director of Pool Reinsurance, among other posts. Brian chairs the Nominations Committee.

Ron Henderson

Ron is a chartered accountant and former CFO of Network Rail and Balfour Beatty. In addition to other non-executive roles, he also served on the UK Auditing Practices Board. Ron chairs the Foundation's Audit, Risk and Investment Committee. Ron was a non-executive director of Lloyd's Register Group Limited and chair of its Audit and Risk Committee from July 2012 until December 2018.

Rosemary Martin

Rosemary is Group General Counsel and Company Secretary of Vodafone Group Plc. She previously served as CEO of the Practical Law Group and prior to that was Reuters' Group General Counsel and Company Secretary and a partner in the City law firm, Rowe & Maw (now Mayer Brown). She is also a Trustee of Vodafone Foundation, and a member of the Council of the University of Sussex. She was an independent non-executive of Ernst and Young and a non-executive director of HSBC Bank Plc (the European arm of HSBC Group). Rosemary represents the Foundation on the Lloyd's Register Group Limited Remuneration Committee.

Carol Sergeant CBE

Carol holds non-executive positions on the boards of Danske Bank AS, BNY Mellon SA/NV and Belmont Green Finance Limited. She is also a member of the Governing Council and Trustee of the Centre for the Study of Financial Innovation and a member of the Global Advisory Board of Cass Business School. She has previously been Chairman of the BSI Standards Strategy and Policy Committee, Managing Director on the board of the Financial Services Authority, Chairman of Public Concern at Work, a non-executive director of TP ICAP plc, and Chief Risk Officer at Lloyds Banking Group, having begun her career at the Bank of England. Carol is a member of the Foundation's Audit, Risk and Investment Committee.

Andreas Sohmen-Pao

Andreas is Chairman of BW Group, BW LPG Limited, BW Offshore Limited and the Singapore Maritime Foundation. He is also a non-executive director of Singapore National Parks Board and Singapore Symphony Orchestra. Mr Sohmen-Pao was previously CEO of BW Group. He has also served as a non-executive director of The Hong Kong and Shanghai Banking Corporation, The London P&I Club, The Esplanade Co Ltd, Sport Singapore and the Maritime and Port Authority of Singapore amongst others. Mr Sohmen-Pao graduated from Oxford University with an honours degree in Oriental Studies and holds an MBA from Harvard Business School.

Lambros Varnavides

Lambros is the former Managing Director and Global Head of Shipping at The Royal Bank of Scotland. Lambros was Chairman of the Baltic Exchange during 2017 and remains on the Baltic Council and is Vice President of The Baltic Exchange Charitable Fund, as well as a member of its Finance Committee. He is a court assistant to the Worshipful Company of Shipwrights and chairs its Finance Committee. He is also a Younger Brother of Trinity House Corporation, a member of the Honourable Company of Master Mariners (including its Finance Committee) and a member of the Executive Committee of the International Maritime Industries Forum. Lambros was appointed Senior Independent Trustee of the Lloyd's Register Foundation on 29 September 2015 and chairs the Grants and Direct Charitable Activities Committee.

Ishbel Macpherson

Ishbel spent over 20 years in corporate finance in the City of London with BZW, ABN AMRO Hoare Govett and Dresdner Kleinwort Benson. In her last role she led the mid-market corporate finance, corporate broking, corporate broking support and investment trust teams at Dresdner Kleinwort Benson. Since leaving the City Ishbel has become an experienced Non-Executive Director having had roles with over 10 publicly listed companies as chairman, chairman of audit committees, remuneration committees and as senior independent director. Currently, she is Senior Independent Director and Chairman of the Remuneration Committee at Dechra Pharmaceuticals plc and a Non-Executive Director of Workspace Group plc. Ishbel is a Trustee of Lloyd's Register Foundation and a member of its Audit, Risk and Investment Committee.

Governance structure

The Board is supported by four committees, which have been delegated authority on certain matters (Audit, Risk and Investment; Grants; Nominations; and the Remuneration Committee which was established in June 2019). Details of which Trustees, executives and independent members sit on these committees are provided in the 'membership of committees' section below.

Trustee recruitment and training

The Board and the Nominations Committee invest considerable time in identifying Trustees with appropriate skills which will benefit the Foundation. They are equally keen therefore that any new trustee is properly inducted into the Board. All new Board members go through a structured period of training.

During their training, the Chairman will talk to them about the history of the Foundation, its role in Society and the way the Board operates. The Secretary will provide a fuller briefing on the operations of the Foundation, its structure, its risks, its key documentation and will provide a general overview of Trustees' duties and responsibilities and charity law. The new Board members will also be encouraged to meet with the senior staff in the Trading Group, so they understand that business, and can therefore affect appropriate oversight.

During the financial year the Trustees undertook an external evaluation of the skills composition and operational effectiveness of the board which did not identify any significant shortcomings. The evaluation was carried out by Leadership Advisor Group, which had no other connection with the Foundation or Lloyd's Register Group Limited. In addition, the Trustees received refresher training on the roles and responsibilities of charity trustees delivered by an external provider.

Remuneration of Trustees

The Trustees are the directors of the Foundation. Trustees are not remunerated for their services as Trustees of the Foundation. The Foundation pays for Trustees' travel expenses to Board meetings.

Membership of committees:

	Status	Foundation Board	Grants and Direct Charitable Activities	Audit, Risk and Investment	Nominations	Remuneration ²
Thomas Thune Andersen	Trustee	Chair	—	—	Member	Member
Sir Brian Bender	Trustee	Member	Member	—	Chair	—
Ron Henderson	Trustee	Member	Member	Chair	—	—
Rosemary Martin	Trustee	Member	Member	—	—	Member
Carol Sergeant	Trustee	Member	Member	Member	—	—
Lambros Varnavides	Trustee	Member	Chair	—	—	—
Andreas Sohmen-Pao	Trustee	Member	—	—	—	—
Ishbel Macpherson ¹	Trustee	Member	—	—	—	—
Allan Whalley	Independent	—	—	Member	—	—
Peter Christmas	Independent	—	—	—	—	—
Michelle Davies	Secretary	—	—	—	—	—
Richard Clegg	Foundation Chief Executive	—	Member	—	—	—
Michael F. Lykiardopulo	Independent	—	—	—	Member	—

Notes:

¹ Appointed 25 June 2019.

² Established on 25 June 2019. The Remuneration Committee has the same membership composition as the Remuneration Committee of Lloyd's Register Group Limited and is chaired by Chris Finlayson, a Non-Executive Director of Lloyd's Register Group Limited.

Executive

The Foundation Chief Executive, Richard Clegg, is responsible to the Board for the operation of the Foundation.

The Advisory Council

The Advisory Council continues to assist the Foundation on delivering its charitable aims by providing independent expert advice, support and constructive challenge in areas including developing general strategy and plans, identifying new funding opportunities and emerging priorities, maximising impact plus suggesting other bodies with which to work. The Advisory Council meets twice a year.

For details of the members of the Advisory Council see lrfoundation.org.uk/about-us/advisory-council.

100A1 Ambassadors

The Foundation launched an ambassador programme in early 2017, 100A1 Ambassador. As a global charity committed to enhancing the safety of life and property and advancing public education, the Foundation's aim through the ambassador programme is to build an international network of friends, stakeholders and beneficiaries who are willing to promote the mission of the Foundation and its causes. For details of the Foundation's 100A1 Ambassadors see lrfoundation.org.uk/about-us/100a1-ambassadors.

360Giving

We are committed to being as transparent as possible so the Foundation is pleased to be one of the growing number of significant UK grant-givers to share grants data through the 360Giving standard. 360Giving supports organisations to publish their grants data in an open, standardised way and helps people to understand and use the data in order to support decision-making and learning across the charitable giving sector. For more information see lrfoundation.org.uk/programmes/360giving-data.

Total footprint of the Foundation's impact

In 2018/19 we continued with our stated aim of having impact and excellence at the heart of our grant making activity through the continued implementation of our impact framework. We also introduced new methods of delivering on our strategy and mission, through innovative ways of working with our grant community and utilising expertise and opportunity from within our trading subsidiary, Lloyd's Register Group Limited. Such mixed-motive investment approaches have enabled us to partner with our own company and others in seeking to accelerate a variety of research outcomes into potentially impactful solutions for issues around global safety.

In expanding our pathway to impact, we are also adapting our approach in how we engage with our stakeholders, not only to see that governance best practice is promoted and enacted, but also to work with our grant holders and bring them together into a Foundation community so they can share ideas and collaborate, and enabling an amplification factor of the funding we distribute. Indeed, in addition to striving to make a positive impact through our grant and direct charitable activity we also expect award holders to use their Foundation grant to leverage funding from others. In encouraging this 'multiplying effect' approach with grantees, the money available to their projects has often grown, and in some instances by upwards of 400%.

Our impact framework developed in 2017/18 has now been fully embedded into our grant contracts and we are already observing an improved flow of impact information that we receive from our funded programmes.

Employees

The Foundation and its Trading Group are equal opportunities employers.

Full consideration is given to applications for employment from disabled persons where the requirements of the job can be adequately fulfilled by a disabled person.

Where existing employees become disabled, it is the Foundation's policy, wherever practicable, to provide continuing employment under normal terms and conditions and to provide training and career development and promotion to disabled employees wherever appropriate.

The Foundation and its Trading Group aim to provide employees with information on matters of concern to them as employees and to enable them to engage with the operations and objectives of the organisation.

Remuneration of the Charity's key management personnel

The remuneration of the Charity's key management personnel is set to:

- provide a base salary designed to attract and retain key management which also reflects their level of responsibility and experience;
- see that they are fairly and responsibly rewarded for their individual contributions; and
- take account of competitive rates of total remuneration based upon surveys of comparative organisations which are undertaken from time to time.

Management of risk

The Board has established an Audit, Risk and Investment Committee and has delegated to it the identification, review and assessment of key risks to the Foundation. These risks are described in a Risk Register which is reviewed at each meeting of the Committee. The updated Risk Register is also tabled at meetings of the board where the Chair of the Audit, Risk and Investment Committee provides a report following each meeting of the Committee. The risks are evaluated according to their impact and likelihood and the Register describes the current mitigations and controls and plans for future development. At the current time, the Board considers the following to be its key risks and associated mitigating controls and procedures:

Risk	Mitigation
Investment performance Lower than forecast income from investments or the Trading Group impacts the Foundation's direct charitable activities.	<p>Continued close review by the Audit, Risk and Investment Committee with active management and frequent reporting by third party investment managers. Portfolio has been split between two competing managers to enable champion/challenger approach. Also, periodic reporting of the Trading Group's strategy and financial performance to the Trustees. Cash flow and reserves are projected in the 5 Year Plan and performance against the plan is monitored by the Board.</p>
Grant giving Grants awarded do not achieve stated outcomes or benefits impacting the Foundation's adherence to its charitable purpose. This could arise from mismanagement of the project, misappropriation of funds or other unforeseen circumstances and might result in reputational damage and regulatory impact.	<p>A detailed and thorough process exists for the evaluation and approval of grant applications, including applicant due diligence where there is uncertainty or risk. Regular monitoring of the progress and impact of grants by the Foundation Chief Executive and Grants and Direct Charitable Activities Committee with a focus on the need for strong evidence of impact.</p>
Negative reporting in the media of LR Foundation Recent increased media focus on the charity sector has resulted in negative news stories relating to a number of large charities. There is an inherent risk that the Foundation receives negative coverage as a result of a misunderstanding of the social investment relationship between the Group and Foundation or an issue or incident relating to a Foundation grant recipient or investee.	<p>Crisis planning and media training are in place with a view to ensuring that trustees and staff are prepared to respond appropriately to media coverage that concerns the Foundation.</p>
Compliance Failure to comply with UK or international law, regulatory requirements or sanctions. Key areas of compliance are charity law, anti-bribery and corruption, sanctions and conflicts of interest.	<p>The Foundation Chief Executive and the Trading Group's General Counsel and Company Secretary keep compliance under close review.</p>
Safety and Security Incidents (including safeguarding) Grantee staff or recipients of grantee services operate in environments that are not under the direct control of the Foundation. There may be incidents or issues that arise in a grantee organisation that impact individuals' safety and/or wellbeing, including vulnerable individuals.	<p>Consideration of grantee health, safety and security risk, where relevant, is incorporated into the grantee application and due diligence process. A specific policy for safeguarding vulnerable individuals has been implemented and grantees are required to confirm their compliance with this policy.</p>
Disaster Fire or similar event at the Foundation's offices results in destruction of irreplaceable historic records and artefacts.	<p>The Foundation's offices at 71 Fenchurch Street, London, have appropriate fire suppression systems and incident response plans, which are tested regularly. The programme of digitisation of the archive will also preserve a duplicate copy.</p>
Cyber attack An advanced targeted cyber-attack could result in the loss of sensitive information.	<p>Sensitive information is identified and is subject to appropriate security measures, which are tested regularly.</p>

The Trading Group has Internal Audit and Risk, and Technical Assurance and Quality functions which provide independent and objective opinions on the adequacy of the Foundation and Trading Group's processes on risk, internal control and governance. The resources of the Internal Audit and Risk, and Group Legal functions are available to the Foundation's Audit, Risk and Investment Committee.

Public benefit

As described throughout this Trustees' Report, the Trustees place specific focus on the public benefits arising from the output and activities of the Foundation having regard to the Charity Commission guidance on public benefit.

Research and development

The Trading Group carries out research and development activities. The amount of £17.1m (2018: £14.7m) has been charged to the consolidated statement of financial activities.

Organisational structure

The Foundation has a total of 21 members of staff supported by a further five secondees from its trading subsidiary. A service level agreement exists between the Foundation and the Trading Group for the provision of specialist business support in areas including finance, HR, communications, legal and IT. The Foundation pays for these services at an agreed market rate.

Disclosure of information to the Auditor

Having made enquiries each of the Trustees, listed above, in office at the time of approving the Trustees' Report confirm that:

- so far as each Trustee is aware, there is no information relevant to the preparation of its report and the financial statements of which the Foundation's Auditor is unaware; and
- each Trustee has taken all steps a trustee might reasonably be expected to have taken to be aware of relevant audit information and to establish that the Foundation's Auditor is aware of that information.

Independent Auditor

Deloitte LLP has expressed a willingness to continue in office.

Governing document

Lloyd's Register Foundation is a company limited by guarantee registered in England, incorporated in 2014, governed by its Memorandum and Articles of Association.

Financial statements and Trustees' Report

The company and consolidated financial statements have been prepared in accordance with the accounting policies set out on pages 36 to 37 and 51 to 55 respectively and comply with applicable laws and the FRS102 Charity SORP (Statement of Recommended Practice).

This Trustees' Report on pages 1 to 27 and 45 to 46 has been prepared in accordance with Part 8 of the Charities Act 2011 and the Companies Act 2006 and incorporates the Strategic Report and has been approved by order of the board.



Michelle Davies
Company Secretary

5 Nov 2019

Legal and administrative details

Company number

07905861 (England and Wales)

Charity number

1145988 (England and Wales)

Bankers

Royal Bank of Scotland
1 Princes Street
London
EC2R 8PB

Statutory Auditor

Deloitte LLP
London
United Kingdom

Investment managers

Sarasin & Partners LLP
Juxon House
100 St. Paul's Churchyard
London
EC4M 8BU

Fidelity International
25 Cannon Street
London
EC4M 5TA

Investment custodians

Bank of New York Mellon
One Canada Square
Canary Wharf
London
E14 5AL

Solicitors

Geldards LLP
Dumfries House
Dumfries Place
Cardiff
CF10 3ZF

Registered and principal office

71 Fenchurch Street
London
EC3M 4BS

Statement of Trustees' responsibilities

The Trustees (who are also directors of the Foundation 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) including FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland".

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 Foundation and the group and of the incoming resources and application of resources, including the income and expenditure, of the Foundation and group 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 judgments and estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Foundation 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 Foundation 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 Foundation and the group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

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

Audit, Risk and Investment Committee Report

This report describes the constitution and activities of the Audit, Risk and Investment Committee in place during the year ended 30 June 2019.

Summary of the role of the Audit, Risk and Investment Committee

The membership of the Audit, Risk and Investment Committee is:

Mr R A Henderson (Committee Chairman)

Mrs C F Sergeant

Mr A Whalley

Ms I J S Macpherson (appointed 25 June 2019)

The Audit, Risk and Investment Committee is a sub-committee of the Board of Trustees. The Committee reviews the application and effectiveness of the policies and processes of the Lloyd's Register Foundation.

The Committee assists the Board of Trustees in monitoring the integrity of the Foundation's published financial statements and seeks to ensure that the Foundation's Annual Report and Accounts comply with UK accounting standards, the Companies Act and the Charities SORP.

The Committee also reviews the performance of the Foundation's investment portfolio and its investment managers and makes decisions on behalf of the Board of Trustees as to an appropriate investment strategy for the Foundation.

The Group's Audit and Risk function reports to the Committee on any issues which it considers impact on the adequacy and effectiveness of the Foundation's internal financial controls and risk management systems. No material items have been reported to the Committee by Group Audit and Risk during the financial year.

The Committee oversees the relationship with the external auditor including approval of the audit plan and scope of the audit. The annual assessment of the auditor's independence and review of the level of fees payable for non-audit services did not identify any significant matters.

The annual financial statements are reviewed by the Committee before recommending their consideration by the Board of Trustees, focusing particularly on any significant adjustments resulting from the audit and major judgmental areas. The Audit, Risk and Investment Committee meets three times a year, and once a year a meeting is held between the Chair of the Committee and the external auditor, at which no employees are present.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF LLOYD'S REGISTER FOUNDATION

Report on the audit of the financial statements

Opinion

In our opinion the financial statements of Lloyd's Register Foundation (the 'charitable company') and its subsidiaries (the 'group'):

- give a true and fair view of the state of the group's and the parent charitable company's affairs as at 30 June 2019 and of the group's incoming resources and application of resources, including the group's income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland"; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements which comprise:

- the Foundation statement of financial activities (incorporating an income and expenditure account);
- the Foundation balance sheet;
- the Foundation cash flow statement;
- the related notes to the Foundation financial statements 1 to 19;
- the consolidated statement of financial activities;
- the consolidated balance sheet;
- the consolidated statement of cash flows; and
- the related notes to the consolidated financial statements 1 to 31.

The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" (United Kingdom Generally Accepted Accounting Practice).

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 group and of the parent charitable company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (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

We are required by ISAs (UK) to report in respect of the following matters where:

- the trustees' use of the going concern basis of accounting in preparation of the financial statements is not appropriate; or
- the trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the group's and the parent charitable company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

We have nothing to report in respect of these matters.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the Trustees' Report (incorporating the Strategic Report and the financial review of the Lloyd's Register Foundation Group), other than the financial statements and our auditor's report thereon. 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.

In connection with our audit of the financial statements, 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 audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. 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 respect of these matters.

Responsibilities of trustees

As explained more fully in the trustees' responsibilities statement, the trustees (who are also the directors of the charitable company for the purpose 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.

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF LLOYD'S REGISTER FOUNDATION

In preparing the financial statements, the trustees are responsible for assessing the group's and the parent 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 group or the parent 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.

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

Report on other legal and regulatory requirements

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' report, which includes the strategic report and the directors' report prepared for the purposes of company law for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the strategic report and the directors' report included within the trustees' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report included within the trustees' report.

Matters on which we are required to report by exception

Under the Companies Act 2006 we are required to report in respect of the following matters if, in our opinion:

- adequate accounting records have not been kept by the parent charitable company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent charitable company 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.

We have nothing to report in respect of these matters.

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.



Hadleigh Shekle, FCA (Senior statutory auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, United Kingdom

7 November 2019

FOUNDATION STATEMENT OF FINANCIAL ACTIVITIES (INCORPORATING AN INCOME AND EXPENDITURE ACCOUNT) FOR THE YEAR ENDED 30 JUNE 2019

	Note	General funds 2019 £000	Endowment funds 2019 £000	Total funds 2019 £000	General funds 2018 £000	Endowment funds 2018 £000	Total funds 2018 £000
Income							
Income from investments:							
Gift aid from Trading Group		—	—	—	60	—	60
From listed investments and other resources		10,385	—	10,385	10,244	—	10,244
Total income	3	10,385	—	10,385	10,304	—	10,304
Expenditure on generating funds							
Investment management costs	4	—	(925)	(925)	—	(929)	(929)
		—	(925)	(925)	—	(929)	(929)
Expenditure on Charitable activities							
Grants:							
Supporting excellent scientific research		(2,129)	—	(2,129)	(6,333)	—	(6,333)
Accelerating the application of research		(2,709)	—	(2,709)	(8,787)	—	(8,787)
Promoting safety and public understanding of risk		(4,365)	—	(4,365)	(1,389)	—	(1,389)
Advancement of skills and education		(2,458)	—	(2,458)	(9,456)	—	(9,456)
Total grants	5	(11,661)	—	(11,661)	(25,965)	—	(25,965)
Direct costs:							
Supporting excellent scientific research		(53)	—	(53)	(61)	—	(61)
Accelerating the application of research		(1,144)	—	(1,144)	(510)	—	(510)
Promoting safety and public understanding of risk		(3,337)	—	(3,337)	(1,102)	—	(1,102)
Advancement of skills and education		(253)	—	(253)	(32)	—	(32)
Total direct costs	5	(4,787)	—	(4,787)	(1,705)	—	(1,705)
Total expenditure		(16,448)	(925)	(17,373)	(27,670)	(929)	(28,599)
Net expenditure before gains / (losses) on investments		(6,063)	(925)	(6,988)	(17,366)	(929)	(18,295)
Realised gains on disposal of listed investments		184	1,789	1,973	3,800	22,658	26,458
Unrealised gains / (losses) on listed investments		1,112	10,828	11,940	(3,306)	(19,709)	(23,015)
Net (expenditure) / income and net movement in funds		(4,767)	11,692	6,925	(16,872)	2,020	(14,852)
Reconciliation of funds							
Funds brought forward		27,181	264,664	291,845	44,053	262,644	306,697
Funds carried forward		22,414	276,356	298,770	27,181	264,664	291,845

All of the Company's income is derived from continuing activities.

There are no recognised gains or losses for the current and preceeding year other than those shown above.

FOUNDATION BALANCE SHEET

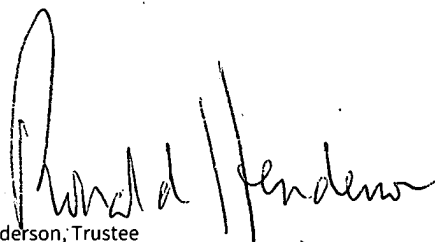
AT 30 JUNE 2019

	Note	2019 £000	2018 £000
Fixed assets			
Investments	10	<u>358,624</u>	<u>366,809</u>
		358,624	366,809
Current assets			
Cash at bank and in hand		206	2,094
Debtors	11	<u>210</u>	<u>—</u>
		416	2,094
Creditors: amounts falling due within one year	13	<u>(31,606)</u>	<u>(22,559)</u>
Net current liabilities		(31,190)	(20,465)
Total assets less current liabilities		327,434	346,344
Creditors: amounts falling due after one year	14	<u>(28,664)</u>	<u>(54,499)</u>
Net assets		<u>298,770</u>	<u>291,845</u>
The funds of the charity			
Unrestricted – general fund		18,700	24,763
Revaluation reserve	17	<u>3,714</u>	<u>2,418</u>
Total unrestricted funds		22,414	27,181
Endowment funds		227,151	228,076
Revaluation reserve	17	<u>49,205</u>	<u>36,588</u>
Total endowment funds		276,356	264,664
Total charity funds	16	<u>298,770</u>	<u>291,845</u>

The financial statements on pages 33 to 44 were approved by the Trustees on

6/11

2019 and signed on their behalf by:



R A Henderson, Trustee

Lloyd's Register Foundation

Company registration number 07905861

FOUNDATION CASH FLOW STATEMENT FOR THE YEAR ENDED 30 JUNE 2019

	Note	2019 £000	2018 £000
Cash flows from operating activities:			
Net cash used in operating activities	A	(34,371)	(18,065)
Cash flows from investing activities:			
Dividends and interest from investments		10,385	10,244
Purchase of investments		(119,479)	(134,368)
Proceeds from sale of listed investments		141,577	134,282
Net cash provided by investing activities		32,483	10,158
Change in cash and cash equivalents in the year		(1,888)	(7,907)
Cash and cash equivalents at the beginning of the year	B	2,094	10,001
Cash and cash equivalents at the end of the year	B	206	2,094

A. Reconciliation of net income / (expenditure) to net cash flow from operating activities

	2019 £000	2018 £000
Net income / (expenditure) for the reporting period (as per the statement of financial activities)	6,925	(14,852)
Adjustments for:		
Gains on investments	(13,913)	(3,443)
Dividends and interest from investments	(10,385)	(10,244)
Increase in debtors	(210)	—
(Decrease) / increase in creditors	(16,788)	10,474
Net cash used in operating activities	(34,371)	(18,065)

B. Analysis of cash and cash equivalents

	1 July 2018 £000	Cash flow £000	30 June 2019 £000
Cash at bank and in hand	2,094	(1,888)	206
Total cash and cash equivalents	2,094	(1,888)	206

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

1. Basis of accounting

Lloyd's Register Foundation is a private company limited by guarantee, incorporated in Great Britain, registered in England and Wales and a registered charity. It is governed by its memorandum and articles.

These financial statements have been prepared under the historical cost convention as modified by the revaluation of certain fixed asset investments. They have been prepared in accordance with the Charities Statement of Recommended Practice ("SORP") FRS102 "Accounting and Reporting by Charities" ("the Charities SORP"), the reporting requirements of the Companies Act 2006 and applicable accounting standards in the United Kingdom. The Foundation meets the definition of a public benefit entity under FRS102. The charitable company has adapted the Companies Act formats to reflect the Charities SORP. The financial statements have been prepared on the going concern basis as discussed in the Trustees' report on page 18.

The functional currency of the company is considered to be Pound Sterling as this is the currency of the primary economic environment in which the company operates.

2. Accounting policies

The principal accounting policies applied in the preparation of these separate financial statements are set out below. These policies have been consistently applied to all periods presented.

a. Income

Income is accounted for on an accruals basis and included in the statement of financial activities when the Company is legally entitled to the income, receipt is probable and the amount can be quantified with reasonable accuracy.

b. Expenditure

Expenditure is accounted for on an accruals basis.

Expenditure on raising funds is costs associated with generating income from investment management.

Expenditure on charitable activities comprises all the costs incurred by the Foundation in undertaking its work to meet its charitable objectives as opposed to the cost of generating the funds to finance these activities. Charitable activities are all the resources expended by the charity in the delivery of goods and services, including its programme and project work that is directed at the achievement of its charitable aims and objectives. Such costs include the direct costs of the charitable activities together with those support costs incurred that enable these activities to be undertaken.

Grants awarded are recognised when the Charity formally notifies the recipient of the award following approval by the Trustees. The liability recognised is for the full amount of the award, whether payable immediately or across a number of financial years as grants are subject to qualitative review rather than strict performance criteria. Where material, grant liabilities in excess of one year are discounted to net present value to reflect the time value of money which is based on the investment returns with a similar risk profile.

Support costs are defined as those costs that are incurred indirectly, and relate principally to grant making activities that then give the Foundation the capability to carry out its charitable activities. They are allocated to the SORP expenditure headings on the basis of underlying expenditure which reflects the level of activity performed.

Short-term employee benefits are recognised as an expense in the period in which they relate.

c. Investments

Listed investments are stated at market value. The statement of financial activities includes realised gains and losses on investments sold in the year and unrealised gains and losses on revaluation of investments.

Investment in the Trading Group (Lloyd's Register Group Limited), which is a mixed motive investment, is valued at cost less any impairment.

d. Cash

Items considered to be cash are those held in hand, in current accounts and on short-term deposit (where the term is less than three months) with recognised financial institutions.

e. Taxation and Value Added Tax

The Foundation is a UK registered charity and is exempt from Corporation Tax under Chapter 3 of Part 11 to the Corporation Tax Act 2010 and section 256 of the Taxation of Chargeable Gains Act 1992 to the extent that surpluses are applied to its charitable purposes.

The Foundation is not registered for VAT and therefore suffers irrecoverable VAT. This expense is recorded and disclosed with the cost of the underlying goods or services.

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

f. Fund accounting

The Foundation's general fund comprises accumulated unrestricted surpluses and deficits.

Endowment funds comprise one expendable endowment fund, a part of the September 2012 donation from the Trading Group. Generally, capital is retained within the fund, with income forming part of the Foundation's general fund. Trustees have the power to convert capital to income should they wish to expend capital subject to the contractual obligations of the initial donation as outlined in note 16.

g. Financial assets and liabilities

Financial assets and financial liabilities are recognised when the Foundation becomes a party to the contractual provisions of the instrument. All financial assets and liabilities are initially measured at transaction price (including transaction costs). With the exception of fixed asset investments, financial instruments are initially recognised at transaction value and subsequently measured at their settlement value.

Debtors are recognised at the settlement amount due. Creditors are recognised where the Foundation 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. Short term creditors are recognised at their settlement amount while grant liabilities are discounted to net present value where the impact is material.

h. Significant accounting estimates and assumptions

The Foundation makes estimates and assumptions to produce the Financial Statements. The accounting estimates will, by nature, differ from the actual results. The key estimate that may have a significant risk of causing a material adjustment to the carrying value of assets or liabilities within the next financial year relates to the discounting of grant liabilities. The rate applied to discount grant liabilities payable after more than twelve months requires an estimate of the appropriate discount rate, as well as an estimate of when the liability will be called down as a claim to be paid. There are no other significant accounting estimates or judgements for the Foundation.

3. Investment income

	General funds £000	Endowment funds £000	Total 2019 £000	Total 2018 £000
Gift aid from Trading Group	—	—	—	60
Listed and other investments:				
Fixed Interest – UK	1,319	—	1,319	1,295
Fixed Interest – Overseas	62	—	62	81
Equities – UK	2,144	—	2,144	2,174
Equities – Overseas	3,230	—	3,230	2,827
Pooled Funds	3,553	—	3,553	3,855
Cash Instruments	71	—	71	8
Bank interest	6	—	6	4
	<u>10,385</u>	<u>—</u>	<u>10,385</u>	<u>10,244</u>
Total	<u>10,385</u>	<u>—</u>	<u>10,385</u>	<u>10,304</u>

4. Expenditure on generating funds

Expenditure on generating funds represents investment management costs, which are charged to the endowment fund.

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

5. Analysis of expenditure on charitable activities

	Grants £000	Unwinding of discount £000	Activities undertaken directly £000	Support costs £000	Total 2019 £000	Total 2018 £000
Grant making activities:						
Supporting excellent scientific research	1,084	649	—	396	2,129	6,333
Accelerating the application of research	1,735	340	—	634	2,709	8,787
Promoting safety and public understanding of risk	3,122	101	—	1,142	4,365	1,389
Advancement of skills and education	1,755	61	—	642	2,458	9,456
	<u>7,696</u>	<u>1,151</u>	<u>—</u>	<u>2,814</u>	<u>11,661</u>	<u>25,965</u>
Direct costs:						
Supporting excellent scientific research	—	—	53	—	53	61
Accelerating the application of research	—	—	1,138	6	1,144	510
Promoting safety and public understanding of risk	—	—	3,326	11	3,337	1,102
Advancement of skills and education	—	—	253	—	253	32
Total	<u>7,696</u>	<u>1,151</u>	<u>4,770</u>	<u>2,831</u>	<u>16,448</u>	<u>27,670</u>

Support costs totalling £2,831,000 (2018: £2,339,000) have been allocated across the Foundation's activities. These include costs associated with IT, HR, finance, property and other central services of the Charity's staff. Included within support costs are staff costs of £1,583,000 (2018: £1,340,000) and governance costs of £54,000 (2018: £48,000).

Governance costs includes fees payable to the Foundation's auditor for the audit of the Foundation's annual accounts of £49,000 (2018: £47,000).

Analysis of expenditure on charitable activities in 2017/2018.

	Grants £000	Unwinding of discount £000	Activities undertaken directly £000	Support costs £000	Total 2018 £000	Total 2017 £000
Grant making activities:						
Supporting excellent scientific research	5,570	194	—	569	6,333	9,411
Accelerating the application of research	7,755	244	—	788	8,787	11,602
Promoting safety and public understanding of risk	1,147	130	—	112	1,389	382
Advancement of skills and education	8,588	—	—	868	9,456	1,367
	<u>23,060</u>	<u>568</u>	<u>—</u>	<u>2,337</u>	<u>25,965</u>	<u>22,762</u>
Direct costs:						
Supporting excellent scientific research	—	—	60	1	61	—
Accelerating the application of research	—	—	509	1	510	—
Promoting safety and public understanding of risk	—	—	1,102	—	1,102	756
Advancement of skills and education	—	—	32	—	32	—
Total	<u>23,060</u>	<u>568</u>	<u>1,703</u>	<u>2,339</u>	<u>27,670</u>	<u>23,518</u>

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

6. Grants awarded

Grants are awarded to institutions and fund tuition costs, employment costs or other costs of research. Grants awarded in 2018/2019 are analysed by institution below.

	Number of grants	Supporting excellent scientific research £000	Accelerating the application of research £000	Promoting safety and public understanding of risk £000	Advancement of skills and education £000	Total 2019 £000
1851 Trust	1	—	—	—	141	141
Aalto University	1	—	680	—	—	680
Bartlett Judge Associates Ltd	1	120	—	—	—	120
British Science Association	1	—	—	50	—	50
Cambridge University Press	1	250	—	—	—	250
The Chancellor, Masters and Scholars of the University of Oxford	1	—	—	143	—	143
The CHIRP Charitable Trust	1	—	—	150	—	150
Educational Volunteers Foundation of Turkey	1	—	—	—	201	201
European Ferry Company SPRL	1	—	—	41	—	41
FISH Safety Foundation	1	—	—	449	—	449
Global Manufacturing Organisation Limited	1	—	—	250	—	250
Gallup	1	—	—	249	—	249
HELEMPA	1	—	—	—	289	289
HiLo Maritime Risk Management Ltd	1	—	—	490	—	490
International Maritime Law Institute	1	—	—	—	174	174
LexaTexer	1	—	30	—	—	30
Marine Institute of Memorial University	1	—	—	150	—	150
Massachusetts Institute of Technology	1	98	—	—	—	98
MonoLets, Inc	1	—	30	—	—	30
Museum of London Archeology	1	—	—	—	100	100
NumberBoost	1	—	30	—	—	30
Open Data Institute Ltd	1	—	99	—	—	99
NeuroControls GmbH	1	—	30	—	—	30
The Royal Institution	2	—	—	228	—	228
RNLI	1	—	—	4	—	4
Senseye, Inc	1	—	40	—	—	40
Seoul National University	1	600	—	—	—	600
Tall Ship Youth Trust	1	—	—	—	126	126
University College of London	2	—	—	468	688	1,156
University of Botswana	1	25	—	—	—	25
University of Manchester	1	—	—	—	38	38
University of Nottingham	1	—	827	—	—	827
University of Southampton	1	—	—	450	—	450
WORKERBASE GmbH	1	—	30	—	—	30
Grants Returned		(9)	(61)	—	(2)	(72)
	36	1,084	1,735	3,122	1,755	7,696
Impact of discounting grants awarded		—	—	—	—	—
		1,084	1,735	3,122	1,755	7,696

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

Grants awarded in 2017/2018 are analysed by institution below:

	Number of grants	Supporting excellent scientific research £000	Accelerating the application of research £000	Promoting safety and public understanding of risk £000	Advancement of skills and education £000	Total 2018 £000
Cranfield University	1	—	108	—	—	108
Food 2.0 LAB Paris	1	94	—	—	—	94
Heriot-Watt University	1	15	—	—	—	15
Imperial College London	2	—	209	—	75	284
Pusan National University	1	500	—	—	—	500
Royal Academy of Engineering	3	5,000	5,000	—	5,000	15,000
Vianair Inc	1	200	—	—	—	200
The Welding Institute (TWI)	1	—	666	—	—	666
1851 Trust for Next Generations Roadshows	1	—	—	—	30	30
TWI Ltd for SEATP	1	—	—	—	2,000	2,000
University of Hull	1	10	—	—	—	10
Blue Marine Foundation	1	—	248	—	—	248
BLOC - Blockchain Labs for Open Collaboration	1	—	490	—	—	490
MX3D for a Smarter Bridge	1	—	82	—	—	82
PETRAS	1	—	280	—	—	280
Cardiff University	1	—	—	250	—	250
CHIRP Charitable Trust	1	—	—	14	—	14
Health & Safety Executive	1	—	195	—	—	195
HiLo Maritime Risk Management Ltd	1	—	—	490	—	490
Imperial College London for A Collaborative Approach to Optimising the Safe Design of Pressure Vessels	1	—	—	148	—	148
nPlan Limited	1	—	59	—	—	59
National Maritime Museum	1	—	—	—	500	500
Pusan National University (KOSORI)	1	—	700	—	—	700
ENTHUSE Charitable Trust	1	—	—	—	300	300
China Academy of Safety Science and Technology	1	—	—	245	—	245
IMO International Maritime Law Institute	1	—	—	—	6	6
Maritime Museum Rotterdam	1	—	—	—	80	80
The Royal Institution	1	—	—	—	455	455
Stellenbosch University	1	—	—	—	165	165
Union of Greek Shipowners	1	—	—	—	10	10
University of Hull	1	—	—	—	150	150
University of Western Australia	1	—	—	—	130	130
Grants returned	—	—	—	—	(47)	(47)
	35	5,819	8,037	1,147	8,854	23,857
Impact of discounting grants awarded	—	(249)	(282)	—	(266)	(797)
	—	5,570	7,755	1,147	8,588	23,060

7. Grants awarded but not paid

	2019 £000	2018 £000
At 1 July	75,547	66,067
Awarded in the year	7,768	23,107
Unwinding of discounting (note 5)	1,151	568
Grant adjustments (note 6)	(72)	(47)
Paid in the year	(25,617)	(14,148)
At 30 June	58,777	75,547

The aging of grants payable is shown in note 14.

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

8. Employees

	General funds £000	Endowment funds £000	Total 2019 £000	Total 2018 £000
Wages and salaries	1,312	—	1,312	1,159
Social security costs	117	—	117	129
Pension costs	154	—	154	156
	<u>1,583</u>	<u>—</u>	<u>1,583</u>	<u>1,444</u>

The average number of employees engaged in charitable activities was 21 (2018: 20).

Included within employee costs above is £287,000 (2018: £229,000) remuneration received by key management personnel. See note 30 of the consolidated financial statements for the key management personnel of the Foundation Group.

The following number of employees earned emoluments within the bands shown below. Emoluments include benefits in kind, but exclude employer defined contribution pension costs.

	Year to 30 June 2019 Number	Year to 30 June 2018 Number
£60,001 - £70,000	2	2
£70,001 - £80,000	—	1
£80,001 - £90,000	1	—
£90,001 - £100,000	—	1
£110,001 - £120,000	—	2
£120,001 - £130,000	1	—
£130,001 - £140,000	1	—
£240,001 - £250,000	—	1
£280,001 - £290,000	1	—

The Foundation made no termination payments during the current or prior year.

9. Trustees

The Trustees are the directors of the Foundation. The Trustees do not currently receive remuneration in respect of their duties as trustees. No Trustees received reimbursement for out of pocket expenses (2018: £nil). £1,000 of expenses were paid on behalf of Trustees (2018: £1,000) in respect of travel expenses to board meetings.

The Foundation maintained throughout the year Trustees' and Officers' liability insurance in respect of itself and its Trustees.

10. Investments

	2019 £000	2018 £000
Listed investments at market value comprise:		
Fixed Interest – UK	35,373	38,078
Fixed Interest – Overseas	965	854
Equities – UK	50,925	44,677
Equities – Overseas	142,273	133,088
Pooled Funds	84,249	104,385
Derivatives	473	287
Cash instruments	739	942
Cash at investment managers and accrued interest	3,577	4,448
	<u>318,574</u>	<u>326,759</u>
Unlisted investments		
Investment in subsidiaries – mixed motive investment at cost less impairment	40,050	40,050
	<u>358,624</u>	<u>366,809</u>

Listed investments and cash held by investment managers

	2019 £000	2018 £000
At 1 July	322,311	319,120
Additions at cost	119,479	134,030
Disposals proceeds	(140,706)	(134,282)
Realised gain on disposals	1,973	26,458
Unrealised gains / (loss)	11,940	(23,015)
At 30 June	314,997	322,311
Cash at investment managers and accrued interest	3,577	4,448
	<u>318,574</u>	<u>326,759</u>

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

Subsidiaries

The Foundation has invested £40,050,000 in its only immediate subsidiary, Lloyd's Register Group Limited. The subsidiaries and joint ventures of Lloyd's Register Group Limited are shown in note 31 to Lloyd's Register Foundation Group Consolidated Financial Statements.

11. Debtors

	2019 £000	2018 £000
Amounts due from Lloyd's Register Group Ltd	5	—
Prepayments and accrued income	205	—
	<u>210</u>	<u>—</u>

12. Trading Group

The Foundation has a mixed motive investment in one trading subsidiary, Lloyd's Register Group Limited which has its own global group of trading companies (the Trading Group). The Foundation owns 100% of the issued share capital of Lloyd's Register Group Limited. The Trading Group's principal activities are the provision of independent inspection and compliance services to clients in capital intensive industries, in particular marine and energy industries.

The summarised financial information of the consolidated Trading Group is provided below, as per the Trading Group's consolidated financial statements for the year ended 30 June 2019.

	2019 Total £000	2018 Total £000 Restated
Turnover	892,847	863,664
Cost of sales	(656,273)	(642,490)
Gross profit	236,574	221,174
Administrative expenses	(227,102)	(214,484)
Administrative expenses before exceptional costs	(206,881)	(205,429)
Operating profit before exceptional costs	29,693	15,745
Exceptional costs	(20,221)	(9,055)
Operating profit	9,472	6,690
Share of net operating loss of joint ventures	(593)	(652)
Net investment income	22,410	12,233
Other finance costs	(1,214)	(4,867)
Profit before taxation	30,075	13,404
Tax on profit	(16,562)	(3,923)
Profit for the financial year	<u>13,513</u>	<u>9,481</u>

	2019 Total £000	2018 Total £000
Assets	1,092,998	1,004,769
Liabilities	(564,338)	(465,888)
Net Assets	<u>528,660</u>	<u>538,881</u>
Shareholder's funds	<u>528,660</u>	<u>538,881</u>

13. Creditors: amounts falling due within one year

	2019 £000	2018 £000
Amounts due to related companies	948	1,068
Grants payable	30,113	21,048
Accruals and deferred income	545	443
	<u>31,606</u>	<u>22,559</u>

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

14. Creditors: amounts falling due after one year

	2019 £000	2018 £000
Grants payable	28,664	54,499
	<u>28,664</u>	<u>54,499</u>

The timing of grants payable is shown in the table below:

	2019 £000	2018 £000
Due within one year	30,113	21,048
Due within 1-2 years	18,290	28,473
Due within 2-5 years	11,908	26,481
Due within 6-10 years	—	2,232
Impact of discounting	(1,534)	(2,687)
	<u>28,664</u>	<u>54,499</u>
Net grants payable	<u>58,777</u>	<u>75,547</u>

15. Contingent liabilities

The Foundation has a contractual obligation until 1 July 2020 to transfer up to £100m of the investment assets received from the Trading Group in September 2012 to the Lloyd's Register Superannuation Fund Association in the event of an insolvency of Lloyd's Register Group Limited. The Trustees consider the risk of insolvency, and therefore the risk of payment of the contingent liability, to be minimal.

16. Funds

	1 July 2018 £000	Income £000	Expenditure £000	Other movements £000	30 June 2019 £000
Total unrestricted funds	27,181	10,385	(16,448)	1,296	22,414
Endowment funds:					
Expendable endowment	264,664	—	(925)	12,617	276,356
	<u>291,845</u>	<u>10,385</u>	<u>(17,373)</u>	<u>13,913</u>	<u>298,770</u>

Other movements relate to realised and unrealised gains and losses on investment assets.

	1 July 2017 £000	Income £000	Expenditure £000	Other movements £000	30 June 2018 £000
Total unrestricted funds	44,053	10,304	(27,670)	494	27,181
Endowment funds:					
Expendable endowment	262,644	—	(929)	2,949	264,664
	<u>306,697</u>	<u>10,304</u>	<u>(28,599)</u>	<u>3,443</u>	<u>291,845</u>

Other movements relate to realised and unrealised gains and losses on investment assets.

In September 2012, the Trading Group transferred a portfolio of investments to the Foundation, with a market value of £206.4m. The transfer was made as a gift of an expendable endowment. The gift also contained a condition that the Foundation must agree to keep £100.0m of that sum as a contingent asset of the Trading Group's UK pension scheme which has been extended until 1 July 2020. During that period the monies can only be transferred to the Pension Scheme in the event of the insolvency of the Trading Group.

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

17. Revaluation reserve

	1 July 2018 £000	Unrealised gains £000	Realised revaluation reserve £000	30 June 2019 £000
Unrestricted – general funds	2,418	1,112	184	3,714
Endowment funds:				
Expendable endowment	36,588	10,828	1,789	49,205
	<u>39,006</u>	<u>11,940</u>	<u>1,973</u>	<u>52,919</u>

	1 July 2017 £000	Unrealised losses £000	Realised revaluation reserve £000	30 June 2018 £000
Unrestricted – general funds	1,924	(3,306)	3,800	2,418
Endowment funds:				
Expendable endowment	33,639	(19,709)	22,658	36,588
	<u>35,563</u>	<u>(23,015)</u>	<u>26,458</u>	<u>39,006</u>

18. Analysis of net assets between funds

	General funds £000	Endowment funds £000	Total 2019 £000	Total 2018 £000
Fixed assets	82,268	276,356	358,624	366,809
Current assets	416	—	416	2,094
Creditors: amounts falling due within one year	(31,606)	—	(31,606)	(22,559)
Creditors: amounts falling due after one year	(28,664)	—	(28,664)	(54,499)
	<u>22,414</u>	<u>276,356</u>	<u>298,770</u>	<u>291,845</u>

	General funds £000	Endowment funds £000	Total 2018 £000	Total 2017 £000
Fixed assets	102,145	264,664	366,809	363,280
Current assets	2,094	—	2,094	10,001
Creditors: amounts falling due within one year	(22,559)	—	(22,559)	(18,263)
Creditors: amounts falling due after one year	(54,499)	—	(54,499)	(48,321)
	<u>27,181</u>	<u>264,664</u>	<u>291,845</u>	<u>306,697</u>

19. Related party transactions

The Foundation has taken advantage of the exemption in Financial Reporting Standard 102, whereby transactions with subsidiary companies ultimately 100% owned by the same parent are not required to be disclosed.

In accordance with the provisions of Financial Reporting Standard 102 the related party transactions entered into by the charity are detailed below. The transactions that arose were in the normal course of business.

The charity awarded a grant of £600,000 in the 2013/14 year to the Worshipful Company of Shipwrights where Lambros Varnavides serves as a member of the Finance Committee. The interest was disclosed before the grant was made and Mr Varnavides did not participate in the grant making decision. Of the grant awarded, £79,000 (2018: £279,000) was outstanding as at 30 June 2019.

In order to accelerate the application of research carried out at The Welding Institute (TWI), TWI and the Trading Group have formed a joint venture, Fullagar Technologies Limited. A grant of £666,000 was awarded to TWI in 2017/18 to pull TWI research into products and services. Of the grant awarded, £440,000 was outstanding at 30 June 2019 (2018: £666,000).

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

FINANCIAL REVIEW OF LLOYD'S REGISTER FOUNDATION GROUP

Strategic report of the Foundation

The Foundation has a direct mixed motive investment in one trading subsidiary, Lloyd's Register Group Limited which has its own global group of trading companies ("the Trading Group"). The Foundation owns 100% of the issued share capital of Lloyd's Register Group Limited. The Trading Group's principal activities are the provision of independent inspection and compliance services to clients in capital intensive industries, in particular the marine and energy industries.

The Foundation's consolidated total income of £916.3 million (2018: £886.3 million) comprises of income recognised by the Trading Group of £905.9 million (2018: £876.1 million) and investment income recognised by the Foundation of £10.4 million (2018: £10.2 million). Income recognised by the Trading Group includes turnover of £892.8 million (2018: £863.7 million) and investment income of £13.0 million (2018: £12.4 million).

The Foundation's consolidated total expenditure of £886.0 million (2018: £865.1 million) relates principally to the Trading Group of £885.1 million (2018: £864.2 million) with the remainder relating to the activities of the charitable entity.

Consolidated net assets for the Foundation at 30 June 2019 are £787.4 million (30 June 2018: £790.7 million), a decrease of £3.3 million from the prior year.

Net consolidated funds (cash and short term deposits) for the Foundation at 30 June 2019 are £81.9 million (30 June 2018: £99.0 million), a decrease of £17.1 million (2018: decrease of £62.2 million) from the prior year.

The performance of the Charitable entity is discussed on pages 16 to 21, and the results of the Trading Group below.

Results of the Trading Group

This financial review of the Trading Group forms part of the strategic report.

The summarised financial information of the consolidated Trading Group is provided in note 17 to the consolidated financial statements, as per the Trading Group's consolidated financial statements for the year ended 30 June 2019.

Turnover of £892.8 million is up £29.1 million or 3.4% on the prior year (2018 restated: £863.7 million) at actual exchange rates. Turnover at prior year exchange rates was £895.0 million.

Operating profit before exceptional costs was £29.7 million, (2018 restated: £15.8 million), £13.9 million higher than the previous year, due to the impact of increased revenue in Marine & Offshore, partially offset by the continuing challenges in the Energy and Inspection market and the impact of the end of New Standards Transition on BA&IS margins.

Exceptional costs of £20.2 million included £11.0 million relating to the system implementations, primarily the Step Up programme and £6.2 million relating to business restructuring, including the Energy reshaping.

Statutory operating profit, after exceptional costs, was £9.5 million (2018: £6.7 million).

Financial position of the Trading Group

Net funds for the Trading Group at 30 June 2019 are £528.7 million (30 June 2018: £538.9 million), a decrease of £10.2 million from the prior year.

Branches of the Group

The Lloyd's Register Foundation group (the Group) has branches, as defined in section 1046(3) of the Companies Act 2006, which are outside the UK.

Financial risk management policies and objectives

The Group is exposed to certain financial risks as a result of its operations and the activities that it carries out. These financial risks include litigation, foreign exchange risk, credit risk, and interest rate risk.

Litigation

In the normal course of business, the Trading Group receives claims for compensation from clients and other associated parties. The Trading Group has in place appropriate policies and procedures to mitigate litigation risk. Although insurance cover is carried to mitigate this risk, the results of litigation can be uncertain and the Trading Group remains exposed to a potential shortfall in this cover.

Foreign exchange risk (price risk)

Foreign exchange exposure is an expected risk of operating across a number of geographies. The Trading Group monitors the impact of foreign exchange on a regular basis. Where possible, the Trading Group uses natural hedges (offsetting costs incurred in a particular currency against revenues earned in that currency) that arise from its normal operating activities to manage its foreign exchange exposures. Where cash-pooling is not permitted by local regulations, non-GBP entities submit cash to head office companies by paying dividends. The amount of cash delivered can be more precisely forecast if the foreign exchange is hedged using 'vanilla' foreign exchange forwards, which involve entering into a contract to sell forward cash flows at a specific maturity date. During the year, the Trading Group implemented a hedging programme on this basis. In addition, derivative financial instruments are used by the Trading Group's third-party investment manager to manage the exposure to foreign exchange risk associated with the Company's investment portfolio. Residual foreign exchange exposure is monitored and is considered tolerable.

NOTES TO THE FINANCIAL STATEMENTS CONTINUED

Liquidity risk and going concern

The Group has net cash of £81.9 million (2018: £99.0 million). In addition, the Group holds listed investments of £454.9 million (2018: £459.4 million) of which £136.4 million (2018: £132.6 million) is held in escrow to make good the deficit on the main UK defined benefit pension scheme in future periods.

The Trustees consider that the cash held by the Group, together with its listed investments, are sufficient to address the Group's liquidity requirements, both in the near and longer term.

The Trustees therefore have a reasonable expectation that the Company and the Group have adequate resources to continue in operational existence for the foreseeable future. Thus they continue to adopt the going concern basis in preparing the financial statements.

Credit risk

It is company policy to perform an assessment of the creditworthiness of new clients and, where appropriate, assign a credit limit to clients' accounts.

Interest rate risk

Derivative financial instruments are used by the Group's third party investment manager to manage the exposure to foreign exchange risk associated with the Company's investment portfolio. Aside from this potential risk the Group has only limited exposure to interest rate risk as it has no external borrowings or other interest-bearing financial instruments.

Further details of the Trading Group

Further details of the financial performance of the Trading Group is included within the Lloyd's Register Group Limited's statutory accounts.

THE CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES, INCORPORATING AN INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 30 JUNE 2019

	Note	Trading funds £000	General funds £000	Endowment funds £000	Total funds 2019 £000	Total funds 2018 £000 Restated (note 1)
Income						
Incoming resources from generated funds						
Income from investments:						
Listed investments	4	5,065	10,379	—	15,444	15,648
Property	4	6,583	—	—	6,583	6,253
Other	4	1,398	6	—	1,404	736
Activities for generating funds	5	892,847	—	—	892,847	863,664
Total income		905,893	10,385	—	916,278	886,301
Expenditure on generating funds						
Investment management costs		—	—	(925)	(925)	(929)
Cost of activities for generating funds		(883,747)	—	—	(883,747)	(859,231)
Other finance costs – pensions		(1,214)	—	—	(1,214)	(4,867)
Other		(102)	—	—	(102)	(68)
Total costs of generating funds		(885,063)	—	(925)	(885,988)	(865,095)
Expenditure on Charitable activities						
Grants:						
Supporting excellent scientific research		—	(2,129)	—	(2,129)	(6,333)
Accelerating the application of research		—	(2,709)	—	(2,709)	(8,787)
Promoting safety and public understanding of risk		—	(4,365)	—	(4,365)	(1,389)
Advancement of skills and education		—	(2,458)	—	(2,458)	(9,456)
Total grants	7	—	(11,661)	—	(11,661)	(25,965)
Direct costs:						
Supporting excellent scientific research		—	(53)	—	(53)	(61)
Accelerating the application of research		—	(1,144)	—	(1,144)	(510)
Promoting safety and public understanding of risk		—	(3,337)	—	(3,337)	(1,102)
Advancement of skills and education		—	(253)	—	(253)	(32)
Total direct costs	7	—	(4,787)	—	(4,787)	(1,705)
Total expenditure		(885,063)	(16,448)	(925)	(902,436)	(892,765)
Net income / (expenditure) before gains / (losses) on investments	11	20,830	(6,063)	(925)	13,842	(6,464)
Unrealised gains / (losses) on investments		14,117	1,112	10,828	26,057	(24,998)
Realised (losses) / gains on disposal of investments		(4,279)	184	1,789	(2,306)	30,605
Net income / (expenditure) before taxation		30,668	(4,767)	11,692	37,593	(857)
Taxation	10	(16,562)	—	—	(16,562)	(3,923)
Net income / (expenditure)		14,106	(4,767)	11,692	21,031	(4,780)
Net interest in the results for the year in joint ventures		(593)	—	—	(593)	(652)
Foreign exchange differences on translation of net assets of overseas operations		1,812	—	—	1,812	(4,933)
Net actuarial movements on defined benefit pension schemes	23	(27,318)	—	—	(27,318)	114,897
Tax relating to components of other comprehensive income		1,772	—	—	1,772	(20,037)
Net movement in funds		(10,221)	(4,767)	11,692	(3,296)	84,495
Funds brought forward (as restated – note 1)		538,880	(12,868)	264,664	790,676	706,181
Funds carried forward		528,659	(17,635)	276,356	787,380	790,676

All amounts presented above relate to continuing operations.

There are no recognised gains or losses for the year other than those shown above. An analysis of the prior year funds is shown in note 6.

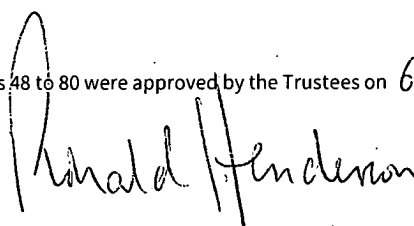
CONSOLIDATED BALANCE SHEET

AT 30 June 2019

	Note	2019 £000	2018 £000 Restated (note 1)
Non Current Assets			
Goodwill	14	91,188	109,868
Intangible fixed assets	14	55,909	57,921
Tangible assets	15	183,575	179,497
Investments	16	459,766	463,739
Pension surplus	23	119,981	119,159
Deferred tax assets	10	24,799	23,654
Interests in joint ventures: share of net assets	16	7,713	3,336
		942,931	957,174
Current assets			
Debtors	18	386,223	357,699
Cash at bank and in hand		81,886	99,000
		468,109	456,699
Creditors: amounts falling due within one year	19	(279,426)	(268,071)
Net current assets		188,683	188,628
Total assets less current liabilities		1,131,614	1,145,802
Creditors: amounts falling due after one year	20	(28,664)	(54,499)
Provisions for liabilities	21	(65,549)	(72,761)
Net assets excluding pension liability		1,037,401	1,018,542
Pension liability	23	(250,021)	(227,866)
Net assets including pension liability		787,380	790,676
The funds of the charity	26,27		
Non charitable trading funds		629,900	677,884
Revaluation reserve		148,780	88,862
General fund	28	(17,635)	(12,868)
Unrestricted funds excluding pension liability		761,045	753,878
Pension reserve		(250,021)	(227,866)
Total unrestricted funds		511,024	526,012
Endowment funds		227,151	228,076
Revaluation reserve	27	49,205	36,588
Total endowment funds	26	276,356	264,664
Total charity funds		787,380	790,676

The financial statements on pages 48 to 80 were approved by the Trustees on 6 November 2019 and signed on their behalf by:

RA Henderson, Trustee



Lloyd's Register Foundation

Company registration number 07905861

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2019

	Note	2019 £000	2018 £000
Net cash outflow from operating activities	29	(58,635)	(49,645)
Cash flows used in investing activities			
(Increase) / decrease in loans		(152)	48
Proceeds from sale of investments		172,022	185,330
Proceeds from sale of tangible fixed assets		2,382	1,458
Purchase of investments		(146,723)	(159,070)
Purchase of intangible fixed assets		(7,387)	(9,425)
Purchase of tangible fixed assets		(11,900)	(8,920)
Interest paid		(474)	(2,322)
Investment income		24,386	21,203
Additional investment in existing joint ventures		(4,821)	(458)
Acquisition of unlisted investments		(300)	(2,499)
Payment of deferred consideration on acquisitions		(1,353)	(622)
Acquisition of subsidiaries		—	(39,294)
Net cash acquired on acquisition of subsidiaries		—	1,993
Net cash flows used in investing activities		25,680	(12,578)
Cash flows from financing activities			
Increase in borrowings		15,841	—
Net decrease in cash and cash equivalents		(17,114)	(62,223)
Cash and cash equivalents at beginning of year		99,000	161,223
Net decrease in cash and cash equivalents		(17,114)	(62,223)
Cash and cash equivalents at end of year		81,886	99,000

Analysis of cash and cash equivalents

Group	At 1 July 2018 £000	Cash flow £000	At 30 June 2019 £000
Bank balances	99,000	(17,114)	81,886
Net funds	99,000	(17,114)	81,886

Reconciliation of net cash flow to movements in net funds

	Cash and cash equivalents £000	Bank overdraft £000	Fair value of derivatives £000	Deferred consideration payable £000	2019 Net funds £000	Cash and cash equivalents £000	Fair value of derivatives £000	Deferred consideration payable £000	2018 Net funds £000
At 1 July	99,000	—	(450)	(5,797)	92,753	161,223	—	(1,297)	159,926
Cash flow	(17,114)	(15,841)	—	422	(32,533)	(62,223)	—	422	(61,801)
Fair value losses	—	—	—	—	—	—	(450)	—	(450)
Other movements	—	—	450	(963)	(513)	—	—	(4,922)	(4,922)
At 30 June	81,886	(15,841)	—	(6,338)	59,707	99,000	(450)	(5,797)	92,753

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2019

1. Basis of accounting and consolidation

The Group financial statements consolidate the financial statements of the Foundation and its subsidiary undertakings drawn up to 30 June each year. The results of subsidiaries acquired or sold are consolidated from or to the date on which control passed. Acquisitions are accounted for under the acquisition method.

These consolidated financial statements have been prepared under the historical cost convention as modified by the revaluation of certain fixed asset investments and derivative financial instruments. They have been prepared in accordance with the Statement of Recommended Practice FRS 102 "Accounting and Reporting by Charities" ("the Charities SORP"), the reporting requirements of the Companies Act 2006 and applicable accounting standards in the United Kingdom. The Group has applied the amendments to FRS 102 issued by the FRC in December 2017 prior to their mandatory effective date of accounting periods on or after 1 January 2019. The charitable company has adapted the Companies Act formats to reflect the Charities SORP. The financial statements have been prepared on the going concern basis as discussed further in the Trustees' report on page 18.

The functional currency of the Group is considered to be Pound Sterling as this is the currency of the primary economic environment in which the Group operates. The consolidated financial statements are also presented in pounds sterling and all values are rounded to the nearest thousand pounds (£000), except where otherwise indicated.

Adjustment in respect of prior periods

Prior period comparatives have been restated for a change in the application of the Trading Group's turnover accounting policy, which if recorded in the current year, would result in an error in the current year's results and which has therefore been recorded by way of restatement. The Trading Group has historically recognised turnover for services rendered at the point at which invoices are rendered for certain short-term services where percentage of completion was not applied as a practical expedient as the difference between recognition on a percentage of completion basis and at the point of invoicing was assessed as immaterial to any one accounting period. This resulted in the recognition of work in progress at cost for work performed not yet invoiced rather than recognition of accrued income.

During the year, the Trading Group completed the implementation of a new ERP system which is designed to systematically recognise all turnover on a percentage of completion basis, and consequently work in progress is not recognised.

Had the Trading Group applied its current revenue recognition approach in preceding periods, income from activities for generating funds for the year ended 30 June 2018 would have been £4,165,000 lower than the £867,829,000 previously reported and cost of activities for generating funds would have been £1,949,000 lower than the £861,180,000 previously reported. The net impact on income before tax would have been a decrease of £2,216,000 from the £1,359,000 previously reported, to a net expenditure. Opening total funds at 1 July 2017 would have been £8,396,000 higher than the £697,785,000 previously reported.

The turnover recognition changes above have meant that work in progress previously included on the balance sheet in relation to cost of work performed not yet invoiced has been de-recognised and accrued income recognised. Prepayments and accrued income have increased by £106,255,000, accruals and deferred income has increased by £81,320,000, with work in progress reduced by £17,212,000 as at 30 June 2018. The change in profit before tax has resulted in restatement of taxation account balances for both profit and loss and balance sheet as detailed below.

The comparative year ended 30 June 2018 for the consolidated accounts has been restated to reflect the following:

- £4,165,000 decrease in income from activities for generating funds from £867,829,000 to £863,664,000;
- £1,949,000 decrease in cost of activities for generating funds from £861,180,000 to £859,231,000;
- £330,000 decrease in taxation charge from £4,253,000 to £3,923,000;
- £17,212,000 decrease in work in progress to £nil;
- £106,255,000 increase in prepayments and accrued income from £24,033,000 to £130,288,000;
- £81,320,000 increase in accruals and deferred income from £112,461,000 to £193,781,000;
- £964,000 increase in taxation liabilities from £10,665,000 to £11,629,000;
- £137,000 decrease in taxation recoverable from £25,405,000 to £25,268,000;
- £112,000 decrease in deferred tax assets from £23,766,000 to £23,654,000; and
- £8,396,000 increase in opening trading funds at 1 July 2017 from £431,137,000 to £439,533,000.

Further information is presented in note 6.

2. Accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented.

a. Income

Income is accounted for on an accruals basis and included in the statement of financial activities when the Group is legally entitled to the income, receipt is probable and the amount can be quantified with reasonable accuracy.

Trading income from surveys and inspection, which are the main activities of the Trading Group, is recorded when service performance is complete and is recognised on the basis of invoices rendered or, in the case of long-term contracts, as work is carried out if the final outcome can be assessed with reasonable certainty. All income is recorded net of VAT and similar sales taxes.

b. Expenditure

Expenditure is accounted for on an accruals basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Expenditure on raising funds includes costs associated with trading activities and investment management.

Expenditure on charitable activities comprise all the costs incurred applied by the Foundation in undertaking its work to meet its charitable objectives as opposed to the cost of generating the funds to finance these activities. Charitable activities are all the expenditure by the charity in the delivery of goods and services, including its programme and project work that is directed at the achievement of its charitable aims and objectives. Such costs include the direct costs of the charitable activities together with those support costs incurred that enable these activities to be undertaken.

Grants awarded are recognised when the Group formally notifies the recipient of the award following approval by the Trustees. The liability recognised is for the full amount of the award, whether payable immediately or across a number of financial years as grants are subject to qualitative review rather than strict performance criteria. Where material, grant liabilities in excess of one year are discounted to net present value to reflect the time value of money which is based on investment returns with a similar risk profile.

Support costs are defined as those costs that are incurred indirectly, and relate principally to grant making activities that then give the Foundation the capability to carry out its charitable activities. They are allocated to the SORP expenditure headings on the basis of underlying expenditure which reflects the level of activity performed.

c. **Tangible fixed assets**

Tangible fixed assets (other than investment properties) are stated at cost, net of depreciation and impairment.

Depreciation of tangible fixed assets is provided using the straight line method, commencing with the year in which they are ready for use, at rates estimated to write off their cost over their respective useful lives as follows:

Motor vehicles	5 years
Office fittings and equipment	8 years
Computer equipment	5 years
Plant and machinery	5 to 20 years
Freehold buildings	5 to 40 years
Leasehold improvements	Length of the lease

Depreciation is not provided in respect of freehold land as it is deemed to have an infinite useful life.

d. **Intangible fixed assets: goodwill**

Goodwill arises on the acquisition of subsidiary undertakings and businesses and represents the excess of the fair value of the consideration given over the fair value of identifiable assets and liabilities acquired.

Goodwill arising on acquisitions is capitalised and amortised on a straight line basis over its estimated useful economic life up to a maximum of 10 years. It is reviewed for impairment if events or changes in circumstances indicate that the carrying value may not be recoverable.

In accordance with Section 35 of FRS 102, Section 19 of FRS 102 has not been applied in these financial statements in respect of business combinations effected prior to the date of transition.

e. **Intangible fixed assets**

Intangible assets relating to intellectual property rights acquired from third party developers are recognised at cost and amortised on a straight line basis over their estimated useful economic lives, which is estimated to be 10 years. Provision is made for any impairment.

Intangible assets relating to software acquired in a separate transaction are recognised at cost including any directly attributable costs of preparing the software for its intended use and amortised using the straight line method over their useful economic lives which are estimated to be from 3 to 11 years. Provision is made for any impairment.

Intangible assets acquired as part of a business combination are measured at fair value at the acquisition date and are amortised over a period of six years which is estimated to be their useful economic life.

f. **Investments**

Listed investments are stated at market value. Unlisted investments are stated at cost. The statement of financial activities includes realised gains and losses on investments sold in the year and unrealised gains and losses on revaluation of investments.

Investment properties includes one property that is in mixed functional and investment use. Areas of the building occupied by third party tenants are deemed to be in investment use and are held at market value with any change in fair value recognised in the consolidated statement of financial activities. A valuation of the building is pro-rated according to the rental value of floor space occupied by third party tenants. The valuation is carried out by a surveyor holding a relevant qualification (via an independent property company).

g. **Work in progress**

Work in progress is stated at the lower of cost (including overheads directly attributable to work carried out) and estimated selling price less costs to sell, which is equivalent to the net realisable value.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

h. Cash

Items considered to be cash are those held in hand, in current accounts and on term deposit (where the term is less than three months) with recognised financial institutions.

i. Taxation and Value Added Tax

The Foundation is a UK registered charity, and is exempt from Corporation Tax under Chapter 3 of Part 11 to the Corporation Tax Act 2010 and section 256 of the Taxation of Chargeable Gains Act 1992, to the extent that surpluses are applied to its charitable purposes.

The Trading Group includes companies and branches that operate overseas and that are subject to foreign tax. Direct tax relating to those entities is included within the consolidated financial statements as a trading cost, and analysed in note 10 to the financial statements. Current tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

The Foundation is not registered for VAT and therefore suffers irrecoverable VAT. This expense is recorded and disclosed with the cost of the underlying goods or services.

j. Deferred tax

Deferred tax is recognised in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events have occurred at that date that will result in an obligation to pay more tax in the future, or a right to pay less or to receive more tax in the future.

Deferred tax assets are recognised only to the extent that on the basis of all available evidence, it can be regarded as more likely than not that there will be suitable taxable profits from which the future reversal of the underlying timing differences can be deducted.

Deferred tax is measured on an undiscounted basis at the tax rates that are expected to apply in the periods in which timing differences reverse, based on tax rates and laws enacted or substantively enacted at the balance sheet date. Deferred tax relating to investment property is measured using the tax rates and allowances that apply to the sale of the asset.

k. Fund accounting

The Foundation's general fund comprises accumulated unrestricted surpluses and deficits.

Non-charitable trading funds represent the accumulated surpluses and deficits retained within the Trading Group.

Endowment funds comprise one expendable endowment fund, a part of the September 2012 donation from the Trading Group. Generally, capital is retained within the fund, with income forming part of the Foundation's general fund. Trustees have the power to convert capital to income should they wish to expend capital subject to the contractual obligations of the initial donation as outlined in note 26.

l. Financial assets and liabilities:

Financial assets and financial liabilities are recognised when the Foundation becomes a party to the contractual provisions of the instrument. All financial assets and liabilities are initially measured at transaction price (including transaction costs). With the exception of fixed asset investments and derivative financial instruments, financial instruments are initially recognised at transaction value and subsequently measured at their settlement value.

Investments in non-convertible preference shares and non-puttable ordinary or preference shares (where shares are publicly traded or their fair value is reliably measurable) are measured at fair value through profit or loss. Where fair value cannot be measured reliably, investments are measured at cost less impairment.

Debtors are recognised at the settlement amount due. Creditors are recognised where the Foundation 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 are recognised at their settlement amount.

Income from quoted securities, which is recorded on an accruals basis, is recognised in investment income as are changes in the fair value of the listed investment portfolio. The Group does not apply hedge accounting for any of its financial instruments.

m. Foreign currencies:

i. Foreign currency denominated assets and liabilities of the Group and its overseas operations are translated at the rate of exchange ruling at the balance sheet date. Exchange differences arising on translation of the opening net assets and results of overseas operations are reported in the statement of financial activities and accumulated in net funds.

ii. Income and expenditure for the year are translated at the appropriate rates prevailing during the year, updated on a monthly basis.

iii. Other exchange differences are shown in net income within the statement of financial activities except for exchange differences on monetary items receivable or payable from/to a foreign operation for which settlement is neither planned nor likely to occur (forming part of the net investment in the foreign operations) which are accumulated in net funds.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

n. Leases

The costs of operating lease rentals are charged to the profit and loss account in the period to which they relate even if the payments are not made on such a basis. Benefits received and receivable as an incentive to sign an operating lease are similarly spread on a straight-line basis over the lease term.

o. Rental income

Rental income from operating leases is recognised on a straight line basis over the term of the relevant lease.

p. Research and development expenditure

Research expenditure is written off as incurred. Development expenditure, including all costs of developing internally generated intangible assets, is also written off, except for costs of bringing purchased software into use, where the directors are satisfied as to the technical, commercial and financial viability of individual projects. In such cases, the identifiable expenditure is capitalised as part of the cost of the purchased software as an intangible asset and amortised over the period during which the Group is expected to benefit. This period is between 1 and 10 years. Provision is made for any impairment.

q. Interest receivable

Interest receivable from bank and short term deposits includes interest accrued. Income from listed investments is recorded on an accruals basis when the income becomes payable to the Group.

r. Short-term employee benefits

Short-term employee benefits are recognised as an expense in the period in which they relate.

s. Pensions

For defined benefit schemes the amounts charged to costs of activities for generating funds are the costs arising from employee services rendered during the period and the cost of plan introductions, benefit changes, settlements and curtailments. They are included as part of staff costs. The net interest cost on the net defined benefit liability is charged to the statement of financial activities and included within other finance costs - pensions. Re-measurement comprising actuarial gains and losses and the return on scheme assets (excluding amounts included in net interest on the net defined benefit liability) are recognised immediately in the statement of financial activities.

Defined benefit schemes are funded, with the assets of the scheme held separately from those of the Group, in separate trustee administered funds. Pension scheme assets are measured at fair value and liabilities are measured on an actuarial basis using the projected unit credit method. The actuarial valuations are obtained at least triennially and are updated at each balance sheet date.

Pension scheme surpluses, to the extent that they are considered recoverable, or deficits are recognised in full and presented on the face of the balance sheet.

For defined contribution schemes the amount charged to the statement of financial activities account in respect of pension costs and other retirement benefits is the contributions payable in the year. Differences between contributions payable in the year and contributions actually paid are shown as either accruals or prepayments in the balance sheet.

Other long-term employee benefits are measured at the present value of the benefit obligation at the reporting date.

t. Investment in joint ventures

In the Group financial statements, investments in joint ventures are accounted for using the equity method. Investments in joint ventures are initially recognised at the transaction price and are subsequently adjusted to reflect the Group's share of the profit or loss and other comprehensive income of the joint venture.

u. Heritage assets

The Group's collection of pictures, furniture and fittings, ship models, books and archive material are considered to be heritage assets. No value is attributed to them in the balance sheet and no depreciation charged on the grounds that for many of the assets, reliable historical cost information is not available and that the depreciated historical cost of these assets is now immaterial.

v. Derivatives

Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The resulting gain or loss is recognised in profit or loss immediately.

w. Provisions

Provision is made on a case-by-case basis in respect of defending claims received and where appropriate, the estimated cost of settling claims. Provisions for employee benefits arising on termination of employment, are recognised when a company is demonstrably committed to a formal plan for termination and is without realistic possibility of withdrawal from the plan.

3. Critical accounting judgements and key sources of estimation uncertainty

In the application of the Group's accounting policies, which are described in note 2, the Trustees are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

The following are the critical judgements, apart from those involving estimations (which are dealt with separately below), that the directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.

Revenue recognition

The Group has long-term customer contracts under which service delivery can extend over a number of years. In accounting for such long-term contracts, an estimate is required of the costs to complete the contract to determine the percentage of completion, which is used to determine the amount of revenue to be recognised. These estimates are used to forecast the ultimate profitability of each contract. If, at any time, these estimates indicate that a contract will be unprofitable, the entire estimated loss for the contract is recognised immediately. If these estimates indicate that any contract will be less profitable than previously forecast, work in progress may have to be written down to the extent that it is no longer considered to be fully recoverable.

Goodwill impairment

The Group assesses at each reporting date whether there is any indication that the goodwill recognised in respect of acquisitions is impaired. Where an indicator is identified, an impairment review is performed which requires the estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires the entity to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate present value. The carrying amount of goodwill at the balance sheet date was £91,188,000 (2018: £109,868,000).

Pension plans

The Group operates pension schemes worldwide, including defined benefit pension schemes, the most significant of which is in the United Kingdom. For a description of the related accounting policies, refer to Note 2 above. Changes in significant assumptions could materially affect the amounts, particularly the rate used to discount the projected benefit obligation. Note 23 to the financial statements describes the principal discount rate, salary increase, inflation, mortality and pension payment increase assumptions that have been used to determine the pension and post-retirement charges. The calculation of any charge relating to pensions is dependent on the assumptions used, which reflects the exercise of judgement. The assumptions adopted are based on advice of the Group's actuaries, on prior experience and market conditions.

Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the balance sheet date that have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities within the next financial year are discussed below.

Income tax

The Group's current tax charge necessarily involves a degree of estimation and judgement in respect of certain items whose tax treatment cannot be finally determined until resolution has been reached with the relevant tax authority or, as appropriate, through a formal legal process. The final resolution of some of these items may give rise to material changes in profits, losses and / or cash flows.

The Group has operations in a large number of different tax jurisdictions which differ in their application of tax law including the availability of certain tax reliefs for the Group's operations. The scale and complexity of the Group's structure makes the degree of estimation and judgement more challenging. The resolution of issues is not always within the control of the Group and is often dependent on the interpretation of tax laws and the efficiency of the legal processes in the relevant taxing jurisdictions in which the Group operates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

4. Investment income

	Trading funds £000	General funds £000	Endowment funds £000	Total funds 2019 £000	Total funds 2018 £000
Fixed Interest – UK	5,065	1,319	—	6,384	6,108
Fixed Interest – Overseas	—	62	—	62	676
Equities – UK	—	2,144	—	2,144	2,174
Equities – Overseas	—	3,230	—	3,230	2,827
Pooled Funds	—	3,553	—	3,553	3,855
Cash Instruments	—	71	—	71	8
	5,065	10,379	—	15,444	15,648
Bank interest	1,398	6	—	1,404	736
Income from UK investment property	6,583	—	—	6,583	6,253
	13,046	10,385	—	23,431	22,637

5. Activities for generating funds

Turnover by class of business of the Trading Group:	2019 £000	2018 £000 Restated (note 1)
Marine and Offshore	427,701	408,354
Energy	143,501	140,329
Business Assurance and Inspection Services*	321,645	314,981
	892,847	863,664

*Previously branded as Management Systems and Inspection Services

Turnover by geographical region is not included since, in the opinion of the Trustees, such an analysis would be seriously prejudicial to the Group's interests.

Expenditure on generating funds

Costs of generating funds include investment management costs and all expenses of the Trading Group including those attributable to public benefit activities but excluding any charitable donations made directly by the Trading Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED.

6. Breakdown of total funds for 2018

	Trading funds £000 Restated (note 1)	General funds £000	Endowment funds £000	Total funds 2018 £000 Restated (note 1)
Income				
Incoming resources from generated funds				
Income from investments:				
Listed investments	5,408	10,240	—	15,648
Property	6,253	—	—	6,253
Other	732	4	—	736
Activities for generating funds	863,664	—	—	863,664
Total income	876,057	10,244	—	886,301
Expenditure on generating funds				
Investment management costs	—	—	(929)	(929)
Cost of activities for generating funds	(859,231)	—	—	(859,231)
Other finance costs – pensions	(4,867)	—	—	(4,867)
Other	(68)	—	—	(68)
Total costs of generating funds	(864,166)	—	(929)	(865,095)
Expenditure on Charitable activities				
Grants:				
Supporting excellent scientific research	—	(6,333)	—	(6,333)
Accelerating the application of research	—	(8,787)	—	(8,787)
Promoting safety and public understanding of risk	—	(1,389)	—	(1,389)
Advancement of skills and education	—	(9,456)	—	(9,456)
Total grants	—	(25,965)	—	(25,965)
Direct costs:				
Supporting excellent scientific research	—	(61)	—	(61)
Accelerating the application of research	—	(510)	—	(510)
Promoting safety and public understanding of risk	—	(1,102)	—	(1,102)
Advancement of skills and education	—	(32)	—	(32)
Total direct costs	—	(1,705)	—	(1,705)
Total expenditure	(864,166)	(27,670)	(929)	(892,765)
Net income / (expenditure) before gains / (losses) on investments	11,891	(17,426)	(929)	(6,464)
Unrealised losses on investments	(1,983)	(3,306)	(19,709)	(24,998)
Realised gains on disposal of investments	4,147	3,800	22,658	30,605
Net income / (expenditure) before taxation	14,055	(16,932)	2,020	(857)
Taxation	(3,923)	—	—	(3,923)
Net income / (expenditure)	10,132	(16,932)	2,020	(4,780)
Net interest in the results for the year in joint ventures	(652)	—	—	(652)
Transfers between funds	(60)	60	—	—
Foreign exchange differences on translation of net assets of overseas operations	(4,933)	—	—	(4,933)
Net actuarial movements on defined benefit pension schemes	114,897	—	—	114,897
Tax relating to components of other comprehensive income	(20,037)	—	—	(20,037)
Net movement in funds	99,347	(16,872)	2,020	84,495
Funds brought forward as previously stated	431,137	4,004	262,644	697,785
Impact of restatement (note 1)	8,396	—	—	8,396
Funds brought forward as restated	439,533	4,004	262,644	706,181
Funds carried forward	538,880	(12,868)	264,664	790,676

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

7. Analysis of expenditure on charitable activities

	Grants £000	Unwinding of discount £000	Activities undertaken directly £000	Support costs £000	Total 2019 £000	Total 2018 £000
Grant making activities:						
Supporting excellent scientific research	1,084	649	—	396	2,129	6,333
Accelerating the application of research	1,735	340	—	634	2,709	8,787
Promoting safety and public understanding of risk	3,122	101	—	1,142	4,365	1,389
Advancement of skills and education	1,755	61	—	642	2,458	9,456
	7,696	1,151	—	2,814	11,661	25,965
Direct costs:						
Supporting excellent scientific research	—	—	53	—	53	61
Accelerating the application of research	—	—	1,138	6	1,144	510
Promoting safety and public understanding of risk	—	—	3,326	11	3,337	1,102
Advancement of skills and education	—	—	253	—	253	32
Total	7,696	1,151	4,770	2,831	16,448	27,670

Support costs totalling £2,831,000 (2018: £2,339,000) have been allocated across the Foundation's activities. These include costs associated with IT, HR, finance, property and other central services of the Charity's staff. Included within support costs are staff costs of £1,583,000 (2018: £1,340,000) and governance costs of £54,000 (2018: £48,000).

Governance costs includes fees payable to the Foundation's auditor for the audit of the Foundation's annual accounts of £49,000 (2018: £47,000).

Analysis of expenditure on charitable activities for 2017/2018.

	Grants £000	Unwinding of discount £000	Activities undertaken directly £000	Support costs £000	Total 2018 £000	Total 2017 £000
Grant making activities:						
Supporting excellent scientific research	5,570	194	—	569	6,333	9,411
Accelerating the application of research	7,755	244	—	788	8,787	11,602
Promoting safety and public understanding of risk	1,147	130	—	112	1,389	382
Advancement of skills and education	8,588	—	—	868	9,456	1,367
	23,060	568	—	2,337	25,965	22,762
Direct costs:						
Supporting excellent scientific research	—	—	60	1	61	—
Accelerating the application of research	—	—	509	1	510	—
Promoting safety and public understanding of risk	—	—	1,102	—	1,102	756
Advancement of skills and education	—	—	32	—	32	—
Total	23,060	568	1,703	2,339	27,670	23,518

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

8. Grants awarded

Grants are awarded to institutions and fund tuition costs, employment costs or other costs of research. Grants awarded in 2018/19 are analysed by institution below.

	Number of grants	Supporting excellent scientific research £000	Accelerating the application of research £000	Promoting safety and public understanding of risk £000	Advancement of skills and education £000	Total 2019 £000
1851 Trust	1	—	—	—	141	141
Aalto University	1	—	680	—	—	680
Bartlett Judge Associates Ltd	1	120	—	—	—	120
British Science Association	1	—	—	50	—	50
Cambridge University Press	1	250	—	—	—	250
The Chancellor, Masters and Scholars of the University of Oxford	1	—	—	143	—	143
The CHIRP Charitable Trust	1	—	—	150	—	150
Educational Volunteers Foundation of Turkey	1	—	—	—	201	201
European Ferry Company SPRL	1	—	—	41	—	41
FISH Safety Foundation	1	—	—	449	—	449
Global Manufacturing Organisation Limited	1	—	—	250	—	250
Gallup	1	—	—	249	—	249
HELEMPA	1	—	—	—	289	289
HiLo Maritime Risk Management Ltd	1	—	—	490	—	490
International Maritime Law Institute	1	—	—	—	174	174
LexaTexer	1	—	30	—	—	30
Marine Institute of Memorial University	1	—	—	150	—	150
Massachusetts Institute of Technology	1	98	—	—	—	98
MonoLets, Inc	1	—	30	—	—	30
Museum of London Archeology	1	—	—	—	100	100
NumberBoost	1	—	30	—	—	30
Open Data Institute Ltd	1	—	99	—	—	99
NeuroControls GmbH	1	—	30	—	—	30
The Royal Institution	2	—	—	228	—	228
RNLI	1	—	—	4	—	4
Senseye, Inc	1	—	40	—	—	40
Seoul National University	1	600	—	—	—	600
Tall Ship Youth Trust	1	—	—	—	126	126
University College of London	2	—	—	468	688	1,156
University of Botswana	1	25	—	—	—	25
University of Manchester	1	—	—	—	38	38
University of Nottingham	1	—	827	—	—	827
University of Southampton	1	—	—	450	—	450
WORKERBASE GmbH	1	—	30	—	—	30
Grants Returned		(9)	(61)	—	(2)	(72)
	36					
Impact of discounting grants awarded		—	—	—	—	—
		1,084	1,735	3,122	1,755	7,696

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Grants awarded in 2017/2018 are analysed by institution below:

	Number of grants	Supporting excellent scientific research £000	Accelerating the application of research £000	Promoting safety and public understanding of risk £000	Advancement of skills and education £000	Total 2018 £000
Cranfield University	1	—	108	—	—	108
Food 2.0 LAB Paris	1	94	—	—	—	94
Heriot-Watt University	1	15	—	—	—	15
Imperial College London	2	—	209	—	75	284
Pusan National University	1	500	—	—	—	500
Royal Academy of Engineering	3	5,000	5,000	—	5,000	15,000
Vianair Inc	1	200	—	—	—	200
The Welding Institute (TWI)	1	—	666	—	—	666
1851 Trust for Next Generations Roadshows	1	—	—	—	30	30
TWI Ltd for SEATP	1	—	—	—	2,000	2,000
University of Hull	1	10	—	—	—	10
Blue Marine Foundation	1	—	248	—	—	248
BLOC - Blockchain Labs for Open Collaboration	1	—	490	—	—	490
MX3D for a Smarter Bridge	1	—	82	—	—	82
PETRAS	1	—	280	—	—	280
Cardiff University	1	—	—	250	—	250
CHIRP Charitable Trust	1	—	—	14	—	14
Health & Safety Executive	1	—	195	—	—	195
HiLo Maritime Risk Management Ltd	1	—	—	490	—	490
Imperial College London for A Collaborative Approach to Optimising the Safe Design of Pressure Vessels	1	—	—	148	—	148
nPlan Limited	1	—	59	—	—	59
National Maritime Museum	1	—	—	—	500	500
Pusan National University (KOSORI)	1	—	700	—	—	700
ENTHUSE Charitable Trust	1	—	—	—	300	300
China Academy of Safety Science and Technology	1	—	—	245	—	245
IMO International Maritime Law Institute	1	—	—	—	6	6
Maritime Museum Rotterdam	1	—	—	—	80	80
The Royal Institution	1	—	—	—	455	455
Stellenbosch University	1	—	—	—	165	165
Union of Greek Shipowners	1	—	—	—	10	10
University of Hull	1	—	—	—	150	150
University of Western Australia	1	—	—	—	130	130
Grants returned		—	—	—	(47)	(47)
	35	5,819	8,037	1,147	8,854	23,857
Impact of discounting grants awarded		(249)	(282)	—	(266)	(797)
		5,570	7,755	1,147	8,588	23,060

9. Grants awarded but not paid

	2019 £000	2018 £000
At 1 July	75,547	66,067
Awarded in the year	7,768	23,107
Unwinding of discounting (note 7)	1,151	568
Grant adjustments (note 8)	(72)	(47)
Paid in the year	(25,617)	(14,148)
At 30 June	58,777	75,547

The aging of grants payable is shown in note 20.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

10. Taxation

The Foundation is a UK registered charity and is not subject to UK corporation tax on its charitable activities.

Many companies and branches within the Trading Group are in jurisdictions where there is no such exemption, and so the overall Group is subject to tax.

	Group	
	2019	2018
	£000	£000
		Restated (note 1)
Current tax on profit		
UK corporation tax	729	587
Double tax relief	(169)	(468)
	<u>560</u>	<u>119</u>
Foreign tax	17,649	18,574
	<u>18,209</u>	<u>18,693</u>
Adjustment in respect of prior periods		
• UK corporation tax	333	76
• Foreign tax	(1,413)	(6,722)
Total current tax	<u>17,129</u>	<u>12,047</u>
Deferred tax		
Origination and reversal of timing differences	(1,072)	(9,305)
Adjustments in respect of previous periods	505	1,181
Total deferred tax	<u>(567)</u>	<u>(8,124)</u>
Total tax on profit	<u>16,562</u>	<u>3,923</u>

The standard rate of tax applied to the reported profit is 19% (2018: 19%). The applicable rate of tax in the UK reduced from 20% to 19% on 1 April 2017, and following enactment of the Finance Act 2016 will reduce further to 17% from 1 April 2020. During the year beginning 1 July 2019, the net reversal of deferred tax assets and liabilities is expected to increase the corporate tax charge for the year by £6.8m (2018: £5.2m). This is due to the reversal of timing differences expected within the next 12 months.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

The differences between the total tax charge shown above and the amount calculated by applying the standard rate of UK corporation tax to the income before tax is as follows:

	Group	
	2019	2018
	£000	£000
		Restated (note 1)
Net income / (expenditure) before taxation	37,593	(857)
Profit multiplied by the average standard rate of United Kingdom corporation tax of: 19 % (2018: 19%)	7,143	(163)
Effects of:		
• Tax exempt profits	(4,343)	(194)
• Overseas rate differences	3,915	3,391
• Goodwill amortisation not deductible for tax purposes	3,628	3,222
• Expenses not deductible for tax purposes / (non-taxable income)	1,570	(2,825)
• Brought forward unprovided timing differences now recognised in year	(1,926)	(3,994)
• Impact of UK qualifying corporate donations	—	(7)
• Current year unprovided timing differences	3,464	8,394
• Fair value gain on investment property not subject to tax	—	(1,395)
• Other taxes	3,686	2,959
• Adjustments in respect of prior periods	(575)	(5,465)
Group total tax charge for year	16,562	3,923

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Deferred tax (assets) / liabilities

	2019 £000	2018 £000 Restated (note 1)
At 1 July asset	(4,819)	(16,421)
Arising in the year	(2,991)	12,651
Acquisitions	—	(1,215)
Foreign exchange differences	21	166
At 30 June asset	(7,789)	(4,819)
Deferred tax asset	(24,799)	(23,654)
Deferred tax liability (note 21)	17,010	18,835
	(7,789)	(4,819)
Deferred tax is recognised as follows:		
Accelerated capital allowances	1,133	(832)
Deferred tax arising in relation to retirement benefit obligations	8,484	9,476
Tax losses	(10,612)	(8,260)
Other timing differences	(6,794)	(5,203)
	(7,789)	(4,819)

Deferred tax liabilities on short-term timing differences are recognised whenever the treatment for tax purposes has enabled deductions to be taken in advance of the financial statements.

Deferred tax assets on short-term timing differences and any overseas losses have not been recognised unless the asset is expected to be recovered in the foreseeable future. Deferred tax assets not recognised amount to £50.7m (2018: £58.7m). Unrecognised assets will potentially become recoverable against future profits generated in the relevant overseas operations.

11. Net income / (expenditure) before gains / (losses) on investments

This is stated after charging / (crediting):

	2019 £000	2018 £000
Staff costs (note 12)	505,331	494,757
Charge for bad and doubtful debts	1,403	4,726
Research and development costs	17,143	14,702
Loss on disposal of fixed assets	151	45
Amortisation of intangible fixed assets (note 14)	9,074	6,200
Depreciation of tangible fixed assets (note 15)	8,581	8,023
Amortisation of goodwill (note 14)	19,236	18,346
Rentals payable under operating leases	38,173	42,951
Unrealised fair value (gains) / losses on forward currency contracts	(450)	450
Realised fair value losses on forward currency contracts	612	931
Exceptional costs (note 17)	20,221	9,055
Auditor's remuneration:		
Audit of parent	49	39
Audit of subsidiaries	1,894	1,811
Other services	114	77
Tax compliance services	57	112
Foreign exchange loss	1,196	3,844

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

12. Employees

	Trading funds £000	General funds £000	Total funds 2019 £000	Total funds 2018 £000
Wages and salaries	414,962	1,312	416,274	406,351
Social security costs	46,900	117	47,017	45,219
Pension costs (note 23)	41,886	154	42,040	32,087
	<u>503,748</u>	<u>1,583</u>	<u>505,331</u>	<u>483,657</u>

In addition, £6.2 million (2018: £4.1 million) of redundancy costs have been incurred.

The average number of employees, analysed by function was:

	2019 Number	2018 Number
Charitable activities	21	20
Trading activities	<u>7,117</u>	<u>6,809</u>
	<u>7,138</u>	<u>6,829</u>

Due to the high number of qualified and skilled staff, the SORP's requirement to disclose the number of all Group employees who received emoluments over £60,000 is commercially sensitive to the operations of that Group and is not made here with the agreement of the Foundation's Trustees.

13. Trustees

The Trustees are the directors of the Foundation. The Trustees do not currently receive remuneration in respect of their duties as trustees. No Trustees received reimbursement for out of pocket expenses (2018: £nil). £1,000 of expenses were paid on behalf of Trustees (2018: £1,000) in respect of travel expenses to board meetings.

The Foundation maintained throughout the year Trustees' and Officers' liability insurance in respect of itself and its Trustees.

14. Intangible fixed assets

	Goodwill £000	Software and other intangibles* £000	Total £000
Cost			
At 1 July	304,755	75,724	380,479
Additions	282	7,387	7,669
Disposals	—	(1,611)	(1,611)
Exchange adjustment	2,407	8	2,415
At 30 June	<u>307,444</u>	<u>81,508</u>	<u>388,952</u>
Amortisation			
At 1 July	194,887	17,803	212,690
Charged during the year	19,236	9,074	28,310
Disposals	—	(1,286)	(1,286)
Exchange adjustment	2,133	8	2,141
At 30 June	<u>216,256</u>	<u>25,599</u>	<u>241,855</u>
Net book value			
At 30 June 2019	<u>91,188</u>	<u>55,909</u>	<u>147,097</u>
At 30 June 2018	<u>109,868</u>	<u>57,921</u>	<u>167,789</u>

*Other intangibles relate to customer relationships acquired as part of business combinations.

The rights to software intellectual property relating to geological surveys were acquired in September 2013 for £10,193,000. The carrying amount as at 30 June 2019 was £4,030,000 (30 June 2018: £5,259,000) and the software has an estimated remaining useful life of four years.

The Group has developed a group-wide enterprise resource planning and financial reporting solution. The net book value as at 30 June 2019 was £24,824,000 (2018: £24,334,000). The intangible asset is being amortised over the estimated useful life of 11 years.

The net book value of an operational system specific to our Marine business at 30 June 2019 was £19,035,000 (2018: £21,110,000). The estimated useful life is 10 years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

15. Tangible fixed assets

	Investment property* £000	Land and buildings £000	Leasehold improvements £000	Office fittings and equipment £000	Plant and machinery £000	Computer equipment £000	Motor vehicles £000	Total £000
Cost or valuation:								
At 1 July	131,402	31,257	21,960	44,772	3,514	57,326	4,559	294,790
Additions	—	—	1,333	943	451	8,988	185	11,900
Revaluations	2,877	—	—	—	—	—	—	2,877
Disposals	—	(731)	(3,709)	(3,269)	(32)	(6,008)	(1,168)	(14,917)
Exchange differences	—	—	439	(194)	65	(699)	(627)	(1,016)
At 30 June	134,279	30,526	20,023	42,252	3,998	59,607	2,949	293,634
Depreciation:								
At 1 July	—	17,797	10,640	28,573	2,278	52,415	3,590	115,293
Charged in year	—	647	1,965	2,873	387	2,390	319	8,581
Disposals	—	(178)	(2,576)	(3,118)	(2)	(5,809)	(1,026)	(12,709)
Exchange differences	—	—	300	(150)	53	(687)	(622)	(1,106)
At 30 June	—	18,266	10,329	28,178	2,716	48,309	2,261	110,059
Net book value:								
At 30 June 2019	134,279	12,260	9,694	14,074	1,282	11,298	688	183,575
At 30 June 2018	131,402	13,460	11,320	16,199	1,236	4,911	969	179,497

*73% (2018: 73%) of the mixed used property is classified as an investment property. Land and buildings includes freehold property in the United Kingdom with a net book value of £10,314,000 (2018: £10,930,000) and estimated market value of £46,394,000 (2018: £49,264,000).

Heritage assets

The Group has accumulated a collection of heritage assets as described in the accounting policies. As a result of their age, and in many cases unique nature, reliable historical cost information is not available for these assets and could not be obtained except at disproportionate expense. The latest insurance valuation of these assets was £7.0m.

Investment property

Investment properties comprise the leased parts of the Trading Group London headquarters at 71 Fenchurch Street, London EC3M 4BS. This property is valued using an external valuation carried out as at 30 June 2019 by the commercial property advisory company Savills, a member of the Royal Institution of Chartered Surveyors. The property is in mixed functional and investment use. A proportion of 73% (2018: 73%) is deemed an investment, based on the value of space let or marketed to third party tenants. The increased proportion has resulted in a transfer from land and buildings to investment property. The property valuation, with an effective date of 30 June 2019, was carried out on a market value basis by a surveyor holding a qualification from the Royal Institution of Chartered Surveyors who has recent experience in the location and class of investment property valued. If the investment property had not been revalued it would have been included at £30,094,000 (2018: £31,786,000).

Significant assumptions included in the valuation of investment property include current investment yields and estimated future rental values, having regard to the age and general condition of the property.

As set out in note 4, rental income from investment properties was £6,583,000 (2018: £6,253,000)

The Group leases the freehold property to a portfolio of tenants. Lease agreements are up to 20 years and typically include rent review clauses. At the balance sheet date, the Group had contracted with tenants for the following future minimum lease payments:

	2019 £000	2018 £000
Within one year	5,795	5,513
In the second to fifth years inclusive	15,861	22,615
After five years	20,692	27,894
	42,348	56,022

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

16. Investments

	2019 £000	2018 £000
Listed investments at market value comprise:		
Fixed Interest – UK	170,012	168,806
Fixed Interest – Overseas	965	854
Equities – UK	50,925	44,677
Equities – Overseas	142,273	133,088
Pooled Funds	84,249	104,385
Derivatives	473	287
Cash Instruments	739	942
	449,636	453,039
Cash at investment managers and accrued interest	5,308	6,330
	454,944	459,369
Unlisted investments	4,417	4,117
Long-term loans	405	253
	459,766	463,739
Investments in joint ventures: share of net assets	7,713	3,336
	467,479	467,075

Listed investments and cash held by investment managers

	2019 £000	2018 £000
At 1 July	453,039	480,448
Additions at cost	146,723	159,070
Disposals proceeds	(171,000)	(185,593)
Realised (losses) / gains on disposals	(2,306)	30,605
Unrealised gains / (losses)	23,180	(31,491)
At 30 June	449,636	453,039
Cash held by investment managers and accrued interest	5,308	6,330
	454,944	459,369

Subsidiaries

A complete list of the subsidiaries and joint ventures is included in note 31.

Joint ventures

The following entities are treated as joint ventures of the Group:

Company	Share of company owned	Country of incorporation and registration	Principal activity
Lloyd's Register Apave Limited	51%	United Kingdom	Engineering inspection
Lloyd's Maritime Information Services Ltd	50%	United Kingdom	Dormant
Common Structural Rules Software LLC	50%	United States of America	Software development
Hanseaticsoft GmbH	55%	Germany	Marine software
Fullagar Technologies Limited	50%	United Kingdom	Development of inspection systems
Xinjiang LR Tunhe Social Economic Consulting Company Limited	60%	China	Engineering inspection

The shareholders' agreements in place for the above entities means that the Group does not have overall control of the company despite the nominal level of ownership.

During the year the Group exercised an option to increase its investment in Hanseaticsoft GmbH from 24% to 55% for cash consideration of £3.9m. Hanseatic remains subject to joint control following the increase in the groups investment.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

The following shows the share of net assets recognised by the Group for these entities:

	Group	
	2019	2018
	£000	£000
Lloyd's Register Apave Limited	104	97
Lloyd's Maritime Information Services Limited	115	115
Common Structural Rules Software LLC	19	—
Hanseaticsoft GmbH	6,789	3,064
Fullagar Technologies Limited	—	—
Xinjiang LR Tunhe Social Economic Consulting Company Limited	686	60
	7,713	3,336

At 30 June 2018 the Common Structural Rules Software LLC joint venture had net liabilities. The Group's share of the net liabilities amounted to £275,000 and was recognised within other provisions.

17. Trading Group

The Foundation has a mixed motive investment in one trading subsidiary, Lloyd's Register Group Limited which has its own global group of trading companies (the Trading Group). The Foundation owns 100% of the issued share capital of Lloyd's Register Group Limited. The Trading Group's principal activities are the provision of independent inspection and compliance services to clients in capital intensive industries, in particular marine and energy industries.

The summarised financial information of the consolidated Trading Group position is provided below, as per the Trading Group consolidated accounts for the year ended 30 June 2019.

	2019	2018
	Total	Total
	£000	£000
		Restated
Turnover	892,847	863,664
Cost of sales	(656,273)	(642,490)
Gross profit	236,574	222,174
Administrative expenses	(227,102)	(214,484)
Administrative expenses before exceptional costs	(206,881)	(205,429)
Operating profit before exceptional costs	29,693	15,745
Exceptional costs	(20,221)	(9,055)
Operating profit	9,472	6,690
Share of net operating loss of joint ventures	(593)	(652)
Net investment income	22,410	12,233
Other finance costs	(1,214)	(4,867)
Profit before taxation	30,075	13,404
Tax on profit	(16,562)	(3,923)
Profit for the financial year	13,513	9,481

	2019	2018
	£000	£000
Assets	1,092,998	1,004,769
Liabilities	(564,338)	(465,888)
Net assets	528,660	538,881
Shareholder's funds	528,660	538,881

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Exceptional costs within administrative expenses

The Group has continued to incur material administrative expenses associated with its restructuring and development programmes. The costs related to:

- the research and implementation phases of major IT development projects of £11.0m (2018: £11.4m);
- redundancy and severance incurred following the implementation of the Group's new ERP system and continued downturn in some of the Group's key markets of £6.2m (2018: £4.1m);
- an increase in onerous lease provision of £1.2m (2018: £3.6m); and
- a cost of £1.8m (2018: £nil) has been recognised in relation to Guaranteed Minimum Pension (GMP) equalisation as a result of a High Court ruling in October 2018. Previously UK pensions legislation set by the government caused gender inequalities for GMPs earned in period from 17 May 1990 to 5 May 1997, the court ruling removes the inequality; and
- in the prior year, the restructure of overseas pension arrangements resulted in a curtailment gain of £29.6m and settlement costs of £19.6m resulting in a net gain of £10.0m (note 23).

18. Debtors

	2019 £000	2018 £000 Restated (note 1)
Trade debtors	201,040	195,107
Other debtors	9,916	7,036
Prepayments and accrued income	146,133	130,288
Taxation recoverable	29,134	25,268
	386,223	357,699

19. Creditors: amounts falling due within one year

	2019 £000	2018 £000 Restated (note 1)
Bank overdraft	15,841	—
Payments received on account	—	3,125
Trade creditors	31,511	18,520
Grants payable	30,113	21,048
Other creditors	1,634	1,160
Other taxation and social security	18,356	18,358
Taxation	14,814	11,629
Accruals and deferred income	167,157	193,781
Fair value of foreign exchange derivatives	—	450
	279,426	268,071

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

20. Creditors: amounts falling due after one year

	2019 £000	2018 £000
Grants payable	28,664	54,499
	<u>28,664</u>	<u>54,499</u>

The timing of grants payable is shown in the table below:

	2019 £000	2018 £000
Due within one year	30,113	21,048
Due within 1-2 years	18,290	28,473
Due within 2-5 years	11,908	26,481
Due within 6-10 years	—	2,232
Impact of discounting	(1,534)	(2,687)
	<u>28,664</u>	<u>54,499</u>
Net grants payable	<u>58,777</u>	<u>75,547</u>

21. Provisions for liabilities

Analysis of other provisions:	Legal claims £000	Acquisition related £000	Employee related £000	Onerous lease £000	Deferred tax £000	Other £000	Total £000
At 1 July 2018 restated (note 1)	5,022	5,797	25,747	9,195	18,835	8,165	72,761
Exchange revaluation	53	—	236	—	69	5	363
(Credited) / charged to Statement of Financial Activities	(450)	963	14,115	1,253	417	725	17,023
Utilised	—	(422)	(18,601)	(1,756)	—	(1,508)	(22,287)
Charged to other comprehensive income	—	—	—	—	(2,311)	—	(2,311)
At 30 June 2019	4,625	6,338	21,497	8,692	17,010	7,387	65,549

Legal claims: In the normal course of business, Lloyd's Register Group entities may receive claims for compensation from clients. Substantial insurance cover is carried for this purpose. Where appropriate, provision is made for the uninsured costs arising from such claims. Adequate provision has been made for the claims notified. The timing on these liabilities is dependent upon the conclusion of the continuing legal proceedings which typically span several years.

Acquisition-related: Provisions relating to amounts payable in future periods for acquisitions completed by the balance sheet date. Settlement of these provisions is expected within two years.

Employee related: Provision is made for redundancy and relocation costs with respect to the restructuring programmes in addition to certain employee benefits, including £9.6m (2018: £12.3m) relating to the settlement of Netherlands pension obligations disclosed in note 23, and repatriation of expatriate workers and other employment related costs. Settlement of these provisions is expected within five years.

Deferred taxation: Liabilities are recognised in relation to deferred tax in respect of all timing differences that have originated but not reversed at the balance sheet date where transactions or events have occurred at that date that will result in an obligation to pay more tax.

Onerous lease: Provision is made for the future anticipated rent expense and related costs of leasehold property (net of estimated sublease income) where the space is vacant or currently not planned to be used for ongoing operations. Settlement of these provisions is expected within 14 years.

Other: Included in this category are provisions maintained to meet contractual obligations to perform restoration on leasehold properties on exit. In addition, provision is made for losses on long-term contracts and share of net liabilities of JVs and other project related costs. With the exception of a small number of leasehold properties, settlement of these provisions is expected within 10 years.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

22. Financial instruments

The carrying values of the Group's financial assets and liabilities measured at fair value through profit and loss are summarised by category below.

	2019 £000	2018 £000
Financial assets		
Investments in listed investments (note 16)	449,636	453,039
Financial liabilities		
Forward currency contracts (note 19)	—	450
Bank overdraft (note 19)	15,841	—

The Group's gains and losses in respect of financial instruments are summarised in note 11. The fair value of investments in listed investments is measured using quoted market prices in an active market.

The Group has entered into call options that enable it to increase its interest in an unlisted investment. At 30 June 2019, the fair value of the call options was £nil (2018: £nil).

The Group enters into forward foreign currency contracts to mitigate the exchange rate risk for certain foreign currency receipts. No outstanding commitments existed at 30 June 2019. At 30 June 2018 the group was committed to sell EUR 6,600,000, USD 5,300,000, KRW 687,700,000, JPY 127,400,000 and receive a fixed sterling amount. The forward contracts were measured at fair value, which was determined using valuation techniques that utilise observable inputs. The key inputs used in valuing the derivatives were the forward exchange rates for GBP: EUR, GBP: USD, GBP: KRW, GBP: JPY.

23. Retirement benefits

Defined benefit pension schemes

Worldwide

The Group operates pension schemes in many of the countries in which the Group operates including defined benefit final salary schemes. Assets of certain schemes are held separately from those of the Group ('funded' schemes) whilst others are unfunded.

UK

The main funded scheme, the Lloyd's Register Superannuation Fund Association was closed to future accrual from 1 October 2010. The scheme continues to fund benefits accrued to that date, and valuations of the scheme are carried out on a triennial basis. The most recent completed valuation was carried out as at 31 March 2016. This showed that the funding position of the scheme had declined from the previous valuation. The funding shortfall was £81m for the 2016 valuation, an increase from £59m in the previous valuation's Recovery Plan as at 31 March 2013. Lloyd's Register Group Limited has placed investments with a market value of £74m in an escrow account as surety. In the year ended 30 June 2019, special contributions of £6.03m (2018: £8.83m) were paid. A further triennial valuation is currently underway.

Netherlands

Effective 1 January 2018 a Defined Benefit pension plan in the Netherlands was converted to a Collective Defined Contribution plan. In the year ended 30 June 2018 the change led to a curtailment gain of £29.6m and settlement costs of £19.6m, a net gain of £10m. Of the £19.6m employee provision created in the prior year, £9.6m remains outstanding at 30 June 2019. Remaining Netherlands Defined Benefit pension plans have assets of £nil (2018: £nil), defined benefit obligations of £1.3m (2018: £1.4m), a net deficit of £1.3m (2018: £1.4m).

Other long-term employee benefits

The Group also contributes to other long-term schemes which provide other benefits. Significant benefits are as follows:

- USA: provision of medical insurance for retired employees subject to age qualification restrictions. This benefit is unfunded with an obligation at 30 June 2019 of £1.5m (2018: £1.5m).
- Korea: provision of a statutory lump sum payable to qualifying employees on leaving service. This is a funded benefit with an obligation at 30 June 2019 of £17.9m (2018: £15.4m), assets of £5.9m (2018: £6.1m) a net obligation of £12.0m (2018: £9.3m).
- UK: the UK has other benefits schemes including the Unfunded, Unregistered Retirements Benefits Scheme (see the Remuneration Committee report on page 12). These benefits are unfunded with an obligation at 30 June 2019 of £10.0m (2018: £9.2m).

Other long-term employee benefits included within provisions (note 21)

Long-term unfunded employee benefits included within provisions are:

- UK: £2.4m (2018: £2.0m) in respect of the Executive Directors and Executive Leadership team of the Trading Group participate in a Long Term Incentive Plan described in more detail in the Remuneration Committee report of Lloyd's Register Group Limited.
- Australia: £1.6m (2018: £1.5m) provision for paid sabbatical leave.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Assumptions

The disclosures have been calculated by qualified independent actuaries, based on the assumptions of the directors and the most recent full actuarial valuations for funded schemes (completed at various dates) and updated to 30 June 2019.

The value of the defined benefit liabilities has been measured using the projected unit method.

The financial assumptions used at 30 June 2019 and 2018 for the different areas are summarised below.

	UK ⁽¹⁾		Japan ⁽²⁾		Eurozone ⁽³⁾		Rest of the World ⁽⁴⁾	
	2019	2018	2019	2018	2019	2018	2019 ⁽⁵⁾	2018 ⁽⁵⁾
Liabilities:	%	%	%	%	%	%	%	%
Rate of price inflation	3.2	3.0	1.0	1.0	1.8	1.8	2.0 to 5.0	2.0 to 5.0
Rate of increase in salaries	n/a	n/a	1.8	1.8	1.8	1.8	1.8 to 5.0	3.5 to 7.0
Rate of increase in pensions	Various	Various	0.8	0.8	Nil to 1.8	Nil to 1.8	2.2 to 5.0	2.0 to 5.0
Discount rate	2.25	2.80	0.5	0.6	0.8 to 1.4	1.4 to 2.1	2.3 to 7.1	3.1 to 8.2

(1) Main United Kingdom funded scheme.

(2) Japanese unfunded liability.

(3) The Eurozone rates have been used to assess the overall deficit within the separate funded schemes in Europe.

(4) This represents a grouped disclosure for the remaining liabilities.

(5) Represents the range of assumptions used for the countries covered in the region.

For mortality tables, the Group has used various different tables appropriate to the territory under review. The most significant contribution to the Group pension liability is from the United Kingdom. The UK mortality table has been updated to reflect recent analysis undertaken as part of the triennial funding valuation. The updated table is based on the self-administered pension schemes (SAPS) "S3" mortality tables with an allowance for future improvements based on the Continuous Mortality Investigation (CMI) 2018 long-term, where tables based on the Self-administered pension scheme (SAPS) light table projected from 2002 have been used, with an allowance for future improvements based on the Continuous Mortality Investigation (CMI) 2015 long-term projections adjusted by 110% for males and 102% for females, with a period smoothing parameter of 7.5 and a long-term trend of 1.25% per annum.

The assumptions shown above are arrived at following discussion with, and in accordance with advice received from the scheme actuaries.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Amounts recognised in the consolidated balance sheet:

	United Kingdom		Japan		Eurozone		Rest of the World		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Cash and cash equivalents	18.5	21.1	—	—	0.3	0.5	2.9	2.3	21.7	23.9
Equity instruments	58.3	188.3	—	—	3.4	3.2	29.3	30.4	91.0	221.9
Debt instruments	971.7	754.0	—	—	19.6	17.5	29.3	25.4	1,020.6	796.9
Real estate	—	—	—	—	—	—	—	—	—	—
Other	17.9	25.8	—	—	—	—	11.5	12.2	29.4	38.0
Market value of assets	1,066.4	989.2	—	—	23.3	21.2	73.0	70.3	1,162.7	1,080.7
Present value of scheme liabilities	(957.4)	(879.9)	—	—	(34.1)	(32.6)	(80.7)	(71.8)	(1,072.2)	(984.3)
	109.0	109.3	—	—	(10.8)	(11.4)	(7.7)	(1.5)	90.5	96.4
Present value of unfunded liabilities	(10.1)	(9.2)	(59.0)	(56.7)	(59.6)	(52.4)	(91.8)	(86.8)	(220.5)	(205.1)
Net pension asset / (liability)	98.9	100.1	(59.0)	(56.7)	(70.4)	(63.8)	(99.5)	(88.3)	(130.0)	(108.7)

The net pension liability is reported on the balance sheet as:

	2019	2018
	£m	£m
Pension surplus	120.0	119.2
Pension liability	(250.0)	(227.9)
Net pension liability	(130.0)	(108.7)

Amounts recognised within income and expenditure (statement of financial activities):

	2019	2018
	£m	£m
Current service cost	6.3	11.2
Curtailment losses / (gains)*	2.1	(30.7)
Administrative expenses	1.2	1.8
	9.6	(17.7)
Interest cost on schemes' liabilities	31.5	34.1
Interest income on schemes' assets	(30.3)	(29.2)
Total amount included under Other finance costs	1.2	4.9

*2019 curtailment losses include £1.8m (2018: £nil) in relation to Guaranteed Minimum Pension equalisation (see note 17).

In addition, there is a charge in respect of contributions to defined contribution plans of £32.3m (2018: £30.0m).

The actual return on scheme assets was £114.5m (2018: £78.0m).

Amounts recognised in the Consolidated Statement of Comprehensive Income (statement of financial activities):

	2019	2018
	£m	£m
Gain on pension scheme assets	84.2	48.8
Experience gains / (losses)	2.6	(12.5)
Change in assumptions	(114.1)	78.6
Actuarial (loss) / gain	(27.3)	114.9

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Changes in the present value of the defined benefit obligations are as follows:

	2019 £m	2018 £m
Opening defined benefit obligation	(1,189.4)	(1,504.1)
Current service cost	(6.3)	(11.2)
Curtailments	(2.1)	30.7
Member contributions	—	(0.5)
Interest cost	(31.5)	(34.1)
Actuarial (loss) / gain	(111.5)	66.1
Exchange adjustments	(6.3)	(2.3)
Settlement payments from plan assets	—	200.3
Benefits paid	54.3	65.7
Closing defined benefit obligation	(1,292.8)	(1,189.4)

Changes in the market value of plan assets are as follows:

	2019 £m	2018 £m
Opening market value of plan assets	1,080.7	1,243.4
Expected return on plan assets	30.3	29.2
Settlement payments from plan assets	—	(200.3)
Benefits and expenses paid	(55.5)	(67.6)
Employer contributions	20.5	26.0
Member contributions	—	0.5
Actuarial gain on assets	84.2	48.8
Exchange adjustments	2.5	0.7
Closing market value of plan assets	1,162.7	1,080.7

24. Contingent liabilities

	2019 £000	2018 £000
In respect of bank guarantees	9,283	8,422
Escrow account for Pension Schemes	136,370	132,610
Other	—	3,000
	145,653	144,032

The Group has issued guarantees to its customers and other stakeholders in relation to its contractual operations in compliance with local legislation and industry practice. The Trustees do not assess the likelihood of transferring economic benefits in respect of these guarantees to be probable. No associated liability has been recognised on the Group's Consolidated Balance Sheet.

Due to the historic funding shortfall on the main defined benefit scheme in the UK, part of Lloyd's Register's portfolio of listed investments was transferred to an escrow account during the year ended 30 June 2011, the beneficiary of which is the Lloyd's Register UK Pension Scheme. Subject to the results of future pension scheme valuations, amounts may be paid out of this escrow account to make good the deficit in future periods. The escrow arrangement will terminate no later than 30 June 2023, when any remaining balance will revert to Lloyd's Register Group Limited unencumbered.

25. Operating lease commitments

At 30 June 2019, the Group had total future lease payments under non-cancellable operating leases as follows:

	Land and buildings		Other equipment	
	2019 £000	2018 £000	2019 £000	2018 £000
Operating leases which expire:				
Within one year	20,019	20,859	7,935	9,038
Within two to five years	56,357	54,642	8,711	10,326
Thereafter	68,190	77,717	65	60
	144,566	153,218	16,711	19,424

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

26. Funds

Trading funds are the retained reserves of the Trading Group, and include the Trading Group's pension deficit.

	Brought forward £000 Restated (note 1)	Incoming resources £000	Resources expended £000	Other movements £000	Total £000
2019					
Trading funds	538,880	905,893	(885,063)	(31,051)	528,659
Unrestricted funds - general funds	(12,868)	10,385	(16,448)	1,296	(17,635)
Endowment funds:					
Expendable endowment	264,664	—	(925)	12,617	276,356
	<u>790,676</u>	<u>916,278</u>	<u>(902,436)</u>	<u>(17,138)</u>	<u>787,380</u>
2018					
Trading funds	439,533	876,057	(864,166)	87,456	538,880
Unrestricted funds - general funds	4,004	10,244	(27,670)	554	(12,868)
Endowment funds:					
Expendable endowment	262,644	—	(929)	2,949	264,664
	<u>706,181</u>	<u>886,301</u>	<u>(892,765)</u>	<u>90,959</u>	<u>790,676</u>

Other movements include realised and unrealised gains and losses on investment assets, taxation change and also include transfers between funds, foreign exchange differences on the translation of net assets in overseas operations, and actuarial movements relating to defined benefit pension schemes.

Transfers between funds relates to a gift from the Trading Group to the Foundation.

In September 2012, the Trading Group transferred a portfolio of investments to the Foundation, with a market value of £206.4m. The transfer was made as a gift of an expendable endowment. The gift also contained a condition that the Foundation must agree to keep £100.0m of that sum as a contingent asset of the Trading Group's UK pension scheme which has been extended until 1 July 2020. During that period the monies can only be transferred to the Pension Scheme in the event of the insolvency of the Trading Group.

27. Revaluation reserve

	Brought forward £000	Unrealised gains arising in year £000	Released from revaluation reserve in period and other movements £000	Total £000
2019				
Trading funds - listed investments	16,774	11,240	44,505	72,519
Trading funds - investment property	69,670	2,877	—	72,547
Unrestricted - general funds	2,418	1,112	184	3,714
Endowment funds:				
Expendable endowment	36,588	10,828	1,789	49,205
	<u>125,450</u>	<u>26,057</u>	<u>46,478</u>	<u>197,985</u>
2018				
Trading funds - listed investments	26,786	(8,475)	(1,537)	16,774
Trading funds - investment property	63,178	6,492	—	69,670
Unrestricted - general funds	1,924	(3,306)	3,800	2,418
Endowment funds:				
Expendable endowment	33,639	(19,709)	22,658	36,588
	<u>125,527</u>	<u>(24,998)</u>	<u>24,921</u>	<u>125,450</u>

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

28. Fund distribution

	Trading funds £000	Unrestricted funds £000	Endowment funds £000	Total 2019 £000
Non-current assets	624,357	42,218	276,356	942,931
Current assets	467,693	416	—	468,109
Creditors: amounts falling due within one year	(248,768)	(30,658)	—	(279,426)
Creditors: amounts falling due after one year	—	(28,664)	—	(28,664)
Provisions	(65,549)	—	—	(65,549)
Pension deficit	(250,021)	—	—	(250,021)
Inter-fund balance	947	(947)	—	—
	<u>528,659</u>	<u>(17,635)</u>	<u>276,356</u>	<u>787,380</u>
	Trading funds £000	Unrestricted funds £000	Endowment funds £000	Total 2018 £000
Non-current assets	630,415	62,095	264,664	957,174
Current assets	454,605	2,094	—	456,699
Creditors: amounts falling due within one year	(246,581)	(21,490)	—	(268,071)
Creditors: amounts falling due after one year	—	(54,499)	—	(54,499)
Provisions	(72,761)	—	—	(72,761)
Pension deficit	(227,866)	—	—	(227,866)
Inter-fund balance	1,068	(1,068)	—	—
	<u>538,880</u>	<u>(12,868)</u>	<u>264,664</u>	<u>790,676</u>

29. Reconciliation of operating surplus to net cash outflow from operating activities

	2019 £000	2018 £000
Net incoming / (outgoing) resources before taxation and other recognised gains and losses	13,842	(6,464)
Pension interest cost	1,214	4,867
Loss on disposal of fixed assets	151	45
Exchange adjustment	5,082	(3,851)
Depreciation	8,581	8,023
Amortisation and impairment charges	28,310	24,546
Increase in debtors	(24,665)	(36,686)
(Decrease) / increase in creditors	(32,857)	27,550
(Decrease) / increase in provisions	(5,328)	7,892
Foreign tax paid	(21,066)	(17,626)
Tax received	3,005	5,109
Defined benefit contributions in excess of funds charges	(13,099)	(12,886)
Curtailed gains / (losses)	2,100	(30,700)
Net investment income	(23,905)	(19,464)
Cash used in operations	<u>(58,635)</u>	<u>(49,645)</u>

Cash at bank and in hand includes cash held in local bank accounts in countries where exchange controls or other legal restrictions mean the balances are not available for general use by the Company or other Group subsidiaries. In total, £22.4m (2018: £23.5m) of cash was held by overseas entities which cannot be remitted to other Group entities and £1.2m (2018: £1.1m) which is held in bank accounts controlled by the Group however access to the funds is currently restricted. In addition to these balances, the immediate movement of cash assets held by other Group entities is subject to compliance with local regulation and legal restrictions; however the Group does not consider this cash unavailable for use by the Group. Countries where such restrictions exist and significant cash balances are held are China (£7.3m) due to exchange controls and Korea (£9.3m) where remittance is permitted following external audit.

The Group holds £19.5m of cash which is immediately available for general use by the Company or other Group subsidiaries. In addition, it can draw on a further £24.2m of Group overdraft facilities.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

30. Related party transactions

The company has taken advantage of the exemption in Financial Reporting Standard 102, whereby transactions with fellow subsidiary companies ultimately 100% owned by the same parent are not required to be disclosed.

The Foundation defines its key management personnel as the Board of Trustees, the Board of Directors and the Executive Leadership Team of the Trading Group. The total remuneration for key management personnel for the year totalled £8,298,000 (2018: £7,289,000).

The following transactions took place between Lloyd's Register Group Limited undertakings in which the Group holds less than 100%:

	Turnover arising from trading with other LR Group companies £000	Operating costs charged by LR Group companies £000	Amounts owed (to) / from Group companies £000
Subsidiaries			
i4Insight, Inc	—	—	—
Lloyd's Register Industrial Services (India) Pvt Ltd	—	—	3
Lloyd's Register International (Thailand) Ltd	113	(440)	(869)
Lloyd's Register Middle East LLC Abu Dhabi	976	(2,232)	(3,131)
Lloyd's Register Oman LLC	338	(915)	1,297
Lloyd's Register Qatar LLC	630	(402)	354
LR Technical Services Sdn Bhd	112	(1,648)	1,205
Senergy International Sdn Bhd	189	(360)	(3,154)
Senergy Global Resources Sdb Bhd	4,330	—	155
Joint ventures			
Lloyd's Register Apave Limited	—	(1,255)	—
Xinjang LR Tunhe Social Economic Consulting Company Limited	40	(40)	—
Hanseaticsoft GmbH	—	(133)	(179)

During the year the Group has increased its investments in Common Structural Rules Software LLC from \$18,475,000 to \$19,625,000 and in i4Insight, Inc from \$600,000 to \$3,200,000.

Long-term loans (note 16) includes a €200,000 (2018: €nil) receivable from Hanseaticsoft GmbH. The loan is for a minimum of two years and interest accrues at 6%. The loan total loan facility amounts to €800,000.

The Group provides administrative services to the Group's pension schemes. The following transactions took place between Lloyd's Register Group Limited and Lloyd's Register Superannuation Fund Association.

	2019 £000	2018 £000
Administrative services provided	240	240
Administrative services payable	20	20

The charity awarded a grant of £600,000 in the 2013/14 year to the Worshipful Company of Shipwrights where Lambros Varnavides serves as a member of the Finance Committee. The interest was disclosed before the grant was made and Mr Varnavides did not participate in the grant making decision. Of the grant awarded, £79,000 (2018: £279,000) was outstanding as at 30 June 2019.

In order to accelerate the application of research carried out at The Welding Institute (TWI), TWI and the Trading Group have formed a joint venture, called Fullagar Technologies Limited. A grant of £666,000 was awarded to TWI during the year to pull TWI research into products and services. Of the grant awarded, £440,000 was outstanding at 30 June 2019 (2018: £666,000).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

31. Group companies

The following are the subsidiaries and joint ventures of the Group at 30 June 2019. All subsidiaries are consolidated. Details are given of the principal country of operation. The equity share capital of these entities is wholly owned by the Group except where its percentage interest is shown otherwise. All companies are incorporated in their principal country of operation except where stated.

There are six entities included in the below list where the Group owns less than 50% of the subsidiary. All of these entities are incorporated in countries where local legislation requires local nationals to hold at least 50% of the issued share capital of each company. For each of these entities, arrangements exist which afford the Group control of the company's financial and operating policies so as to obtain benefit from its activities.

Company	Country of Origin	Registered Address	% of Ownership
Acoura Holdings Ltd	UK	71 Fenchurch Street, London EC3M 4BS, UK	100
Acoura Compliance Ltd	UK		100
Acoura Consulting Ltd	UK		100
Classification and Quality Services Ltd	UK		100
Classification Holdings Ltd	UK		100
Lloyd's Maritime Information Services Ltd	UK		50
Lloyd's Register Apave Limited	UK		51
Lloyd's Register Asia ¹	UK		100
Lloyd's Register Asia Trustees Limited ¹	UK		100
Lloyd's Register Consulting - Energy Limited	UK		100
Lloyd's Register Central and South America Ltd ¹	UK		100
Lloyd's Register EMEA ¹	UK		100
Lloyd's Register EMEA Trustees Ltd ¹	UK		100
Lloyd's Register GMT Ltd	UK		100
Lloyd's Register Group Services Limited ¹	UK		100
Lloyd's Register Inspection Ltd ¹	UK		100
Lloyd's Register International ¹	UK		100
Lloyd's Register Limited	UK		100
Lloyd's Register Nominee 1 Ltd	UK		100
Lloyd's Register Nominee 2 Ltd	UK		100
Lloyd's Register Quality Assurance Ltd ¹	UK		100
Lloyd's Register Superannuation Trustees Ltd	UK		100
Lloyd's Register Verification Ltd ¹	UK		100
LR Senergy Limited (dissolved 28 August 2018)	UK		100
Perry Scott Nash Training Ltd	UK		100
Seasafe Marine Software & Computation (UK) Ltd	UK		100
Nettitude Ltd	UK		100
Threat2Alert Limited	UK		100
Nettitude Forensics Limited	UK		100
Fullagar Technologies Limited	UK	Bevan Braithwaite Building Granta Park, Great Abington, Cambridge, CB21 6AL	50
Lloyd's Register Drilling Integrity Services (UK) Ltd	UK	Kingswells Causeway, Prime Four Business Park, Kingswell, Aberdeen, AB15 8PU, Scotland	100
Lloyd's Register Finance Limited (formerly Senergy Technology Limited) ¹	UK		100
Senergy Holdings Ltd	UK		100
Senergy Trustees Limited (dissolved 21 August 2018)	UK		100
Senergy Wells Limited	UK		100
Senergy (GB) Limited	UK		100
Senergy Development Solutions Limited (dissolved 21 August 2018)	UK		100
Interactive Petrophysics Limited	UK		100
Senergy Oil & Gas Limited	UK		100
Senergy Survey & Geoengineering Limited (dissolved 21 August 2018)	UK		100
Senergy Resources Limited	UK		100
Senergy Group Limited (dissolved 21 August 2018)	UK		100
Senergy Software Limited	UK		100
Senergy Limited	UK		100
Senergy Aligned Services Limited	UK		100
Floyd and Associates Limited (dissolved on 28 August 2018)	UK	7 Bon Accord Square, Aberdeen, AB11 6DJ, Scotland, UK	100
RTAMO Limited (dissolved 22 January 2019)	UK		100
Acoura Certification Ltd	UK		100
Acoura Marine Ltd	UK		100
Acoura Ltd	UK		100
SFQC Ltd	UK	50 Lothian Road, Festival Square, Edinburgh, EH3 9WJ, Scotland, UK	100
Food Certification Scotland Ltd	UK		100
Food Certification International Ltd	UK		100

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Company	Country of Origin	Registered Address	% of Ownership
71FS Insurance Company Limited ¹	GUERNSEY	Polygon Hall, Le Marchant Street, St Peter Port, GY1 4HY, Guernsey	100
Lloyd's Register Employment Services Limited (dissolved on 7 September 2019)	GUERNSEY	Heritage Hall, La Marchant Street, St Peter Port, GY1 4HY, Guernsey	100
Lloyd's Register Drilling Integrity Services Australia Pty Ltd (sold on 28 June 2019)	AUSTRALIA	Level 1, 503 Murray Street, Perth WA 6000, Australia	100
Senergy Econnect Australia Pty Limited	AUSTRALIA	Level 1, 60 Toorak Road, South Yarra VIC 3141, Australia	100
Lloyd's Register Bangladesh Pvt Ltd	BANGLADESH	11 th Floor, 9 Mohakhali C/A, Dkaka - 1212, Dhaka, Bangladesh	100
Lloyd's Register Belgie vzw ¹	BELGIUM	Lloyd's Register Belgie VZWD, Rijnkaai 37, 20000 Antwerp, Belgium	100
Lloyd's Register Do Brasil Ltda	BRAZIL	Rua da Gloria, 311-11, Andar, Rio de Janeiro, RJ, 20.241.180, Brazil	100
Lloyd's Register Serviços de Integridade de Perfuração Ltda (merged with Lloyd's Register Do Brasil Ltda 30 March 2019)	BRAZIL		100
WEST Services Tecnicos do Brasil Ltda	BRAZIL	Rua do Camo no 7, 18 Andar, Rio de Janeiro, Brazil	100
Lloyd's Register Quality Assurance Canada Limited	CANADA	5420 North Service Road, Suite 506 Burlington, Ontario L7L 6C7 Canada	100
Lloyd's Register Energy Canada Ltd	CANADA	Suite 400, 355 4th Avenue SW, Calgary AB T2P 0J1, Canada	100
Lloyd's Register Canada Limited	CANADA	1888 Brunswick Street, Suite 400, Halifax NS B3J 3j8, Canada	100
MARTEC Limited	CANADA	1888 Brunswick Street, Suite 400, Halifax NS B3J 3j8, Canada	100
Lloyd's Register Classification Society (China)Co Ltd	CHINA	19 th Floor, 550 Yan An dong Road, Huangpu District, Shanghai, China	100
Lloyd's Register Industrial Technical Services (Shanghai) Co. Ltd	CHINA	20 th Floor, Ocean Towers, No 550 Yan An Dong Road, Huang District, Shanghai, China	100
LRQA (Shanghai) Co Ltd	CHINA	20th Floor, Ocean Towers, No 550 Yan An Dong Road, Huang District, Shanghai, China	100
Lloyd's Register Consulting Energy Inc	CHINA	Room 805, Tower E, Global Trade Center, 36 North Third Ring Road East, Beijing, 100013, P.R. China	100
Xinjiang LR Tunhe Social Economic Consulting Company Limited	CHINA	802 Tianhe New City Plaza, Tower A, 38 He Nan Dong Road, Xinshi District, Urumqi, Xinjiang, China	60
Lloyd's Register Central and South America (Curaçao) NV	CURAÇAO	Alablancaweg No. 30 Wilhelminalaan 13, Curaçao	100
Lloyd's Register Denmark Holdings ApS	DENMARK	Strandvejen 104 A, 2 nd Floor, DK-2900, Hellerup, Denmark	100
Lloyd's Register Consulting - Energy A/S	DENMARK	Strandvejen 104 A, 2 nd Floor, DK-2900, Hellerup, Denmark	100
Lloyd's Register Egypt LLC	EGYPT	Apartment no 303-3 rd Floor, 13 Ramo Gardens Street - EL Nasr Road, Nasr City, Cairo, Egypt	100
Lloyd's Register Quality Assurance France SAS	FRANCE	Tour Societe Suisse, 1, bld Vivier Merle, 69003, Lyon, France	100
Lloyd's Register Deutschland GmbH	GERMANY	Lloyd's Register EMEA, Adolf-Grimme-Allee 3, 50829 Köln, Germany	100
Hanseaticsoft GmbH	GERMANY	Frankenstraße 29, 20097 Hamburg, Germany	55
Hellenic Lloyd's SA	GREECE	87 Akti Miaouli, Piraeus, 18538, Greece	100
Lloyd's Register Italia S.R.L. ¹	ITALY	Via Sottoripa 1A/112	100
Lloyd's Register Quality Assurance Italy Srl	ITALY	16124 Genova GE, Italy Piazza della Vittoria 6, 16121, Genova, Italy	100
Lloyd's Register Consulting - Energy Private Ltd	INDIA	503, 5 th Floor, Nitco Biz Park 1, Plot No C/19, Road No 16-U, Eagle Estate, MIDC, Thane (W), Maharashtra, 400604, India	100
Lloyd's Register Industrial Services (India) Pvt Ltd ¹	INDIA	63-64 Kalpataru Square, 6 th Floor, Kondivita Lane, Off Andheri-Kurla Road, Andheri (E), Mumbai, 400 059, India	51

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Company	Country of Origin	Registered Address	% of Ownership
Lloyd's Register Marine and Inspection Services (India) LLP	INDIA	63-64 Kalpataru Square, 6 th Floor, Kondivita Lane, Off Andheri-Kurla Road, Andheri (E), Mumbai, 400 059, India	100
PT Lloyd's Register Indonesia	INDONESIA	Menara Dea Tower 1, 12 th Floor, JL Mega Kuningan Barat IX Kav, E4.3 No1, Kawasan Mega Kuningan, Jakarta, 12950, Indonesia	100
Lloyd's Register Japan Kabushiki Kaisha	JAPAN	Queen's Tower A, 2-3-1 Minatomirai, Nishi-Ku, Yokohama	100
Lloyd's Register Kazakhstan LLP	KAZAKHSTAN	29/6 Satpayev Street, Floor, Rakhat Palace Hotel, Almaty, Kazakhstan	100
Lloyd's Register Quality Assurance (Korea) Ltd	KOREA	17 th Floor, Sinsong Building, 25-4 Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-711, Korea	100
LRQA Lietuva UAB	LITHUANIA	Lvovo Str 25, Vilnius, LT-09320, Lithuania	100
Lloyd's Register Drilling Integrity Services International (L) Ltd	MALAYSIA	Lot 2&3, Level 3, Wisma Lazenda, Jalan Kemajuan, 87000 Federal Territory of Labuan, Malaysia	100
Lloyd's Register of Shipping (Malaysia) Bhd	MALAYSIA	No 10, Persiaran KLCC, 50088, Kuala Lumpur, Malaysia	100
Lloyd's Register Technical Services Sdn Bhd ¹	MALAYSIA	No 10, Persiaran KLCC, 50088, Kuala Lumpur, Malaysia	49
Senergy International Sdn Bhd	MALAYSIA	10 th Floor, Menara Hap Seng, No 1& 3, Japan P Ramlee, 50250, Kuala Lumpur, Malaysia	49
Senergy Global Resources Sdn Bhd	MALAYSIA	Level 10, Menara LGB, No 1, Jalan Wan Kadir, Taman Tun Dr Ismail, 6000 Kuala Lumpur, Malaysia	49
Lloyd's Register Energy & Transportation S de CV.de RL	MEXICO	Calle Habaneras 271 401, Jardines de Virginia, Boca del rio, Veracruz, 94294, Mexico	100
Lloyd's Register Drilling Integrity Services Holding B.V	NETHERLANDS	Gapingseweg 1A, Serooskerke, 4343JA, Walcheren, Netherlands	100
Lloyd's Register Nederland BV	NETHERLANDS	Wnna-Zuid 168, 3012NC, Rotterdam, Netherlands	100
LR Verification BV ¹	NETHERLANDS	KP van der Mandelelaan 41 A, 3062 MB Rotterdam, Netherlands	100
Lloyd's Register Norway Holdings AS	NORWAY	P.O. Box 376 Skøyen, N-0213 Oslo, Norway	100
Lloyd's Register Consulting – Energy AS	NORWAY	Drammensveien 169, N-0277 Oslo, Norway	100
Lloyd's Register EMEA (Nigeria) Ltd Gte	NIGERIA	6 th Floor, B Wing, Shippers Plaza, 4 Park Lane, Apapa, Lagos, Nigeria	100
Lloyd's Register West Africa Ltd	NIGERIA	6 th Floor, B Wing, Shippers Plaza, 4 Park Lane, Apapa, Lagos, Nigeria	100
Lloyd's Register Oman LLC	OMAN	Bait Al Bahja, Building No 603, Room 21, Way No 2710, Ruwi CBD, Muscat, Sultanate of Oman, PO BOX 2715, RUWI PC-112, Oman	70
Lloyd's Register (Polska) Sp Zoo	POLAND	Al. Zwyciestwa 13a, 80-219, Gdansk, Poland	100
Lloyd's Register Qatar LLC	QATAR	Regus Building D-Ring Road, Doha, PO Box 10285, Qatar	49
Lloyd's Register (Romania) SRL	ROMANIA	Sos. Iancului 31, Etaj 3, 021716 Bucuresti, Romania	100
Lloyd's Register Saudi Arabia Ltd	SAUDI ARABIA	Office Number 7 Second Floor, West Tower Building, AL Khobar, Abdul Azeez Street, Saudi Arabia	100
Lloyd's Register D.O.O. (Beograd)	SERBIA	Vojvode Stepe 78, Beograd, Serbia	100
Lloyd's Register Quality Assurance España SL	SPAIN	Calle Princesa 29, 28008, Madrid, Spain	100
Lloyd's Register España SA	SPAIN	Princesa, 29-1, 28008, Madrid, Spain	100
Lloyd's Register Drilling Integrity Services Asia Pacific Pte. Ltd	SINGAPORE	1 Fusionopolis Place, #09-11 Galaxis, 138522, Singapore	100
Lloyd's Register Singapore Pte Limited	SINGAPORE	1 Fusionopolis Place, #09-11 Galaxis, 138522, Singapore	100
Senergy Oil and Gas (Singapore) Pte. Ltd. (dissolved 6 May 2019)	SINGAPORE	6 Temasek Boulevard, #29-00 Suntec Tower G, 038986, Singapore	100

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - CONTINUED

Company	Country of Origin	Registered Address	% of Ownership
Lloyd's Register Consulting – Energy AB	SWEDEN	PO Box 1288, 172 25 Sundbyberg, Sweden	100
LRQA Sverige AB	SWEDEN	Goateborgsvagen 74, Box 2107, 43302, Savedalen, Sweden	100
Lloyd's Register Sweden Holdings AB	SWEDEN	PO Box 1288, 172 25 Sundbyberg, Sweden	100
RiskSpectrum AB	SWEDEN	Box 1288, 172 25 Sundbyberg, Sweden	100
Lloyd's Register International (Thailand) Ltd	THAILAND	3388/78 Floor 22, Sirinrat Building, Rama IV Road Klong-Ton Sub-district, Klong-Toey District, Bangkok, 10110, Thailand	49
Lloyd's Register Gozetim Ltd Sti	TURKEY	Ataturk Caddesi, Sitkibey Plaza, No 82 Kat 3 Daire 12, Kozyatagi, Istanbul, Turkey	100
Lloyd's Register (Ukraine)	UKRAINE	63 Bolshaya Morskaya Street, Office 203, Mykolaiv, 54001, Ukraine	100
Lloyd's Register Middle East LLC	UAE	The Blue Tower Building, Khalifa Street, Abu Dhabi, UAE	49
Lloyd's Register Americas, Inc. ¹	USA	1330 Enclave Parkway, Houston, Texas, 77077, USA	100
Common Structural Rules Software LLC	USA	16855 Northchase Drive, Houston, TX 77060, USA	50
Lloyd's Register Drilling Integrity Services, Inc.	USA	1330 Enclave Parkway, Houston, Texas, 77077, USA	100
Lloyd's Register Energy Americas, Inc.	USA		100
Lloyd's Register North America, Inc.	USA		100
Lloyd's Register Quality Assurance, Inc.	USA		100
Lloyd's Register Technical Services, Inc.	USA		100
LR Insurance, Inc.	USA		100
Nettitude, Inc.	USA	50 Broad Street, New York, NY 10004	100
SGC Engineering LLC	USA	501 County Road, Westbrook Maine 04092, USA	100
i4Insight, Inc	USA	1209 Orange Street, Wilmington, Delaware 19801, USA	80
Lloyd's Register Asia (Vietnam) Company	VIETNAM	Suite 450 Petrovietnam Tower, 8 Hoang Dieu Street, Ward 1, Vung Tau City, Ba Ria, Vung-Tau Province, Vietnam	100

¹ Wholly owned directly by Lloyd's Register Group Limited

The following subsidiaries have taken advantage of the exemption from audit under section 479A of the Companies Act 2006 relating to subsidiary companies.

Company	Place of registration	Registered number
Classification and Quality Services Limited	England and Wales	03973758
Classification Holdings Limited	England and Wales	03704447
Lloyd's Register Consulting – Energy Limited	England and Wales	07630518
Lloyd's Register Drilling Integrity Services (UK) Ltd	Scotland	SC115074
Lloyd's Register GMT Limited	England and Wales	06428883
Lloyd's Register Group Services Limited	England and Wales	06193893
Lloyd's Register Verification Limited	England and Wales	04929226
Senergy Resources Limited	Scotland	SC346964
Lloyd's Register Finance Limited	Scotland	SC320138
Senergy Aligned Services Limited	Scotland	SC318186
Senergy Oil and Gas Limited	Scotland	SC350041
Senergy Holdings Limited	Scotland	SC252441