

TRUSTEE BOARD'S REPORT AND ANNUAL ACCOUNTS YEAR ENDED 31 DECEMBER 2018

Institution of
**MECHANICAL
ENGINEERS**



Incorporated by Royal Charter 1930
Registered Charity No: 206882

PRESIDENT'S STATEMENT

I was delighted and honoured to be appointed by Council and the Trustee Board to take up the role of President for the second time in my life and the past 10 months has been about refocusing the Institution on what makes it great – its Members.

IMechE is first and foremost a charitable membership organisation and our Royal Charter is clear that our object and purpose is to 'promote the development of Mechanical Engineering and to facilitate the exchange of information and ideas thereon'. It is crucial that we remember this and it has been our relentless focus as we have delivered activity during this year and as we made plans for the future, whilst always being mindful of our charitable aims.

The period leading up to my resuming the Presidency was extremely challenging for IMechE. It was essential that the Institution came together and worked towards solutions that addressed the various issues. With the support of our Members, we were able to get the governance and finance reviews requested by the membership urgently underway and have subsequently begun a third review looking at our Code of Conduct.

However, it has also been important that while these reviews were underway that we continue to look to the future and how best to continue delivering our vision of 'improving the world through engineering.' I have made it my goal to speak to as many Members as possible to understand what they want from their Institution and what more it can be doing to support their priorities and activities both in the UK and across the world.

What I've heard loud and clear is that our active Members often felt distanced from the decision making at the Institution and that it hasn't always been as easy as it should be for Members to gain a clear understanding of the decision making at the Institution.

Our structure is designed to be transparent and to ensure accountability – this was introduced during my first term in office in the early 2000s, when we created the Trustee Board and Council structure – one of the biggest changes to the structure of the Institution in its history. We planned for a Trustee Board taking strategic decisions, supported by a Council and board structure which provides expert advice and scrutiny of the Institution's activities. The reviews have looked at this structure to ensure that it works as it should, giving the Institution a stronger platform to build from. A huge amount of work from active Members and the executive team has gone into making sure our rules and governance processes continue to evolve to ensure IMechE remains vibrant and relevant.

Getting this right will have tremendous significance for our Institution, leading to improved delivery of our charitable aims and allowing us to continue our important mission to develop engineers, promote engineering and encourage innovation – helping future engineers to have a broader skills base than ever before; continuing to encourage research, innovation and entrepreneurship and having that contribution to wider society recognised and valued as it should be.

I have taken great pleasure in working together with the Trustee Board, Council, the wider membership and the fantastic team of staff at IMechE to work towards this but much remains to be done. I hope we have built a strong platform from which our Institution can now continue to thrive to the benefit of us all and the generations of engineers to come.

Tony Roche
FREng FIMechE CEng BSc Hon DTech



A portrait of Dr Colin Brown, a middle-aged man with thinning grey hair and glasses, wearing a dark suit, light blue shirt, and a striped tie. He is looking directly at the camera with a slight smile. The background is a blurred indoor setting with warm lighting.

CHIEF EXECUTIVE'S STATEMENT

An Institution year where we have had three Presidents and two Chief Executives can hardly be described as 'on plan' but despite these changes it is welcoming to be able to report as we look back on a series of achievements that give credit to both our membership and to our staff. In total we met or exceeded 24 of the specific 34 goals that we set ourselves for the year.

The shortcomings as you will see were around our financial performance and our ability to undertake our digital transformation with as much progress as we would like. We have studied and now know the reasons for both and already have in hand the actions needed to start to turn these around in 2019. It's also fair to say that we have failed to make substantial progress on achieving strategic change in the way the overall engineering profession runs itself following the Uff report in 2017. Our desire for relevance however has not diminished, and we are taking the chance from our own changes to 'regroup' and try new approaches that will bring others to the table.

Our successes in 2018 however are many and various. They reflect our relentless focus on "improving the world through engineering" and engaging with key like-minded communities.

I have selected a few headlines overleaf. The common theme through them all is harnessing the power of our active membership and keeping a close eye on our expenditure whilst we revel in the multitude of ways that our engineers contribute to society.

Finally, I hope that the new format of the report this year, with more trend lines and comparisons, helps you to see our achievements in context. Whilst not everything is a record, I am proud of what our Members with support from my team have achieved. In many ways our experiences in 2018 have shown all that is good about professional engineering institutions. We certainly look forward to 2019 with enthusiasm to once again 'raise the bar' on our ambitions.

Dr Colin Brown
CEng FIMechE FIMMM

HEADLINES

- Ongoing operations ran a deficit of £0.8M before £2.0M of exceptional costs noted in the Financial Review (2017 - £1.6M deficit)
- After all financial gains and losses the result was a total deficit of £6.1M (2017 - £1.4M surplus) (see pages 44-45)
- Major financial impacts from stock market movements, pension fund revaluation, digital transformation write-off and costs associated with the Special Meeting
- Seventh year in succession as the leading Engineering Council licensee for new registrations
- Record public profile with £53.7 million of Advertising Value Equivalent from our media engagement
- Leading contributor to the UK Year of Engineering 2018 through impact evaluation
- Creation of a new autonomous vehicle category in Formula Student
- Female membership increasing but still a cause for concern (9.13%)
- Over 200,000 students and delegates engaged via member activities

The members of the Trustee Board submit their annual report and audited accounts for the year ended 31 December 2018. The provisions of the Statement of Recommended Practice (SORP) “Accounting and Reporting by Charities” issued in 2015 have been adopted in preparing the annual report and accounts of the charity.

Our Vision

The Institution’s vision is “improving the world through mechanical engineering”, and the Institution endeavours to be the recognised authority in mechanical engineering supporting a global engineering community.

In order to achieve this vision we have developed four strategic objectives.

- SO 1. Develop Engineers
- SO 2. Promote Engineering
- SO 3. Inform Opinion
- SO 4. Encourage Innovation



STRATEGIC OBJECTIVE REVIEW

SO 1

Develop Engineers

SO 1.1

Be a leading PEI for professional registration

Objective I

Complete improved membership application process review with new process agreed and ready for implementation.

- What We Said We'd Do: Completed user testing of new applications system.

- Full Year Performance: ●

Objective II

Be a leading register of EngTechs, including through the Trailblazers programme - offering an integrated platform that links with employers' apprenticeship programmes.

- What We Said We'd Do: Achieve joint approved

proposals for apprenticeship End Point Assessment (EPA), with a minimum of 100 trialed apprentice assessments achieving potential for cost-neutral delivery.

- Full Year Performance: ●

Objective III

Maintain the diversity and volume of applications, migrations and registrations across the world during the 2018 Digital Transformation and Operating Model programme transition.

- What We Said We'd Do: The percentage of women in membership to be greater than or equal to 2017.

- Full Year Performance: ●

- What We Said We'd Do: Overall paying membership to be greater than or equal to the end of 2017.

- Full Year Performance: ●

Objective IV

Ensure the Academic Review process enables the timely review of international accords with a plan in place for 2019.

- What We Said We'd Do: Achieve approval for revised

Academic Review processes.

- Full Year Performance: ●

SO 1.2

Provide world class products and services to engineers, and those engaged with engineering

Objective

Deliver new digital platform to deliver existing offerings and plan and develop future products and services.

- What We Said We'd Do: Deliver the new events, training, marketing and sales functionality, including improved; e-commerce; marketing; promotion of events, training, and digital library.

- Full Year Performance: ●

- What We Said We'd Do: Launch new portal, new PE and digital news content through the creation of a Content Hub, pooling engineering expertise, content marketing, PR and public affairs resources to achieve greater collaboration.

SO 1.3

Ensure employer relevance

Objective

Develop and deliver Career Developer 2.0

- What We Said We'd Do: Review the Career Developer suite of tools and align with new Professional Development offering as part of an integrated development plan for employers and employees. Deliver new MPDS/SRS by year-end, better meeting the needs of employers and their employees.

- Full Year Performance: ●

- Full Year Performance: ●

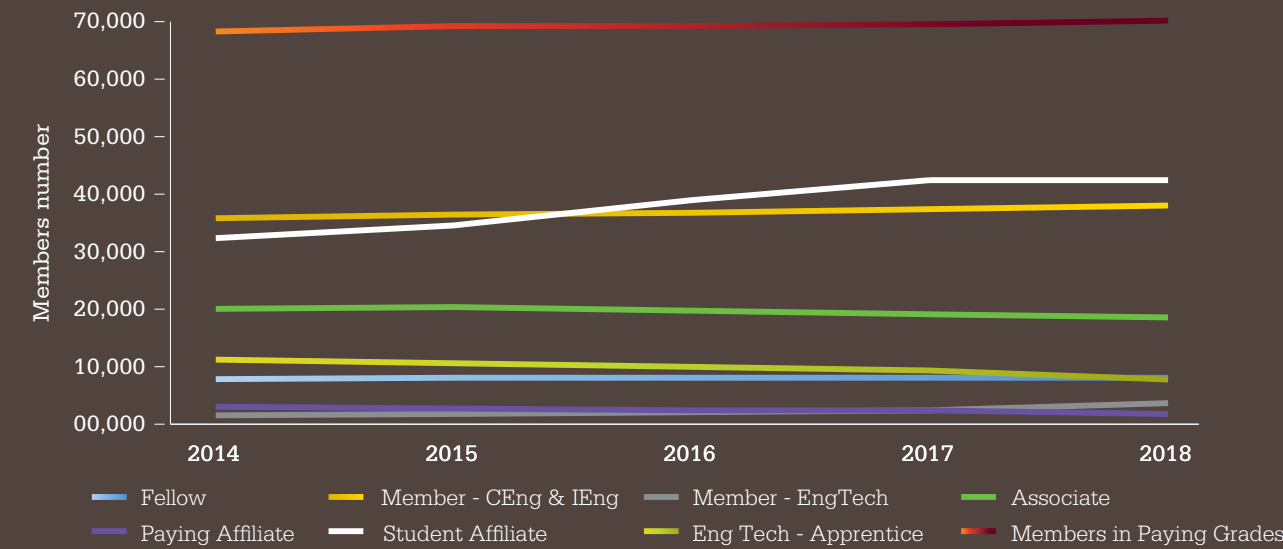
- What We Said We'd Do: Increase by 5% the total number of delegates attending volunteer-supported activities.

- Full Year Performance: ●

- What We Said We'd Do: Increase downloads from the digital information services by 10%.

- Full Year Performance: ●

Chart 1. Membership growth 2014–2018



SO 1.4

Support contemporary ways of working and cover a broad range of disciplines

Objective I

Evolve the Learned Society offering through the provision of a greater variety of webinars that are attractive and accessible to a global and diverse audience.

- **What We Said We'd Do:** Deliver 12 Divisions & Groups webinars (compared to eight in 2017), engaging a global audience of more than 2,000 (compared to 1,600 in 2017) across at least 35 countries.
- **Full Year Performance:** ●

Objective II

Small incremental improvements in Learning & Development and Events output

- **What We Said We'd Do:** Increase average attendance on paid-for technical events to 75 (from 68 in 2017) and on 'free-to-attend' events to 125 (from 112 in 2017).
- **Full Year Performance:** ●

Objective III

Develop a proposal for the joint-development of a new, digital knowledge portal for use by several PEIs.

- **What We Said We'd Do:** Jointly approved programme to improve access to multiple PEI content as part of the general PEI collaboration programme in Strategic Objective 3.3.
- **Full Year Performance:** ●

Objective IV

Adopt the RAEng Diversity and Inclusion Progression Framework

- **What We Said We'd Do:** Deliver report on progress through the framework with demonstrable progression.
- **Full Year Performance:** ●

SO 1.5

Offer new, innovative forms of membership that support engineering

Objective I

Proposals drawn up to attract the 3 million potential subscribers including an employer proposition and proposals to encourage diversity and inclusion.

- **What We Said We'd Do:** Support the Uff Review "Missing 3 million" project and achieve approval for joint proposals for improving the appeal of PEI offerings for implementation from 2019.
- **Full Year Performance:** ●

Objective II

Develop concepts for 'Federated Membership'

- **What We Said We'd Do:** Achieve substantial progress in joint PEI strategic change.
- **Full Year Performance:** ●

Review of performance

We strive to be a leading professional engineering institution (PEI) for professional registration that provides world class products and services to engineers, as well as those engaged with engineering.

As part of this, we are committed to ensuring continued relevance for employers, as well as supporting contemporary ways of working across a broad range of different engineering disciplines. This includes offering a variety of new and innovative forms of membership that supports the engineering world both in the UK and internationally.

Chart 2. Member organised activities 2014–2018

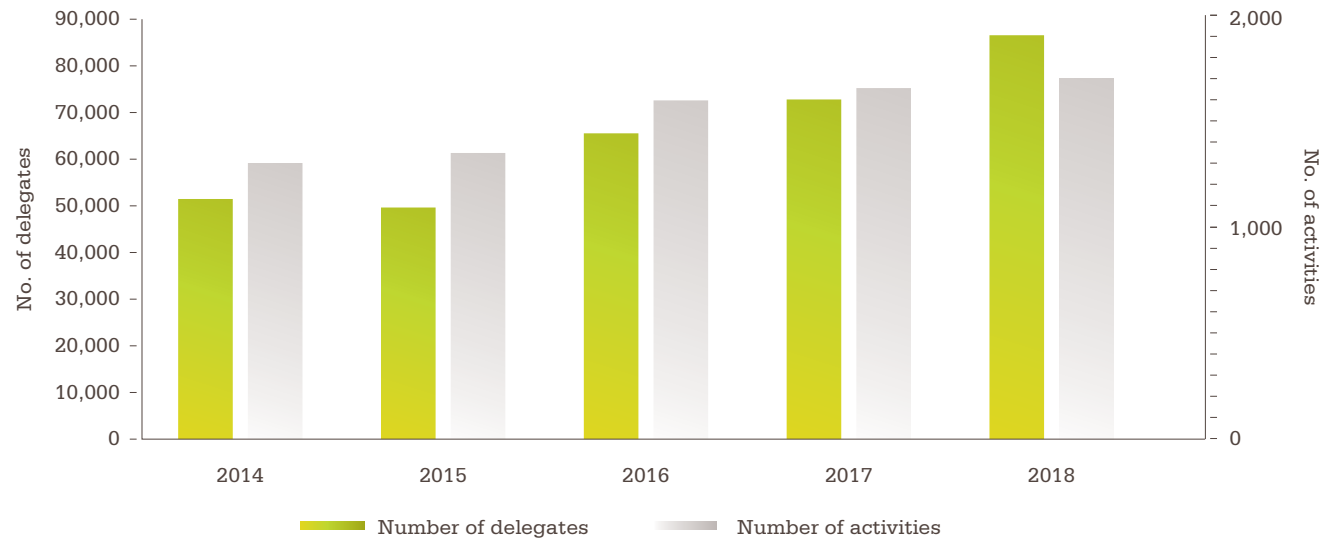
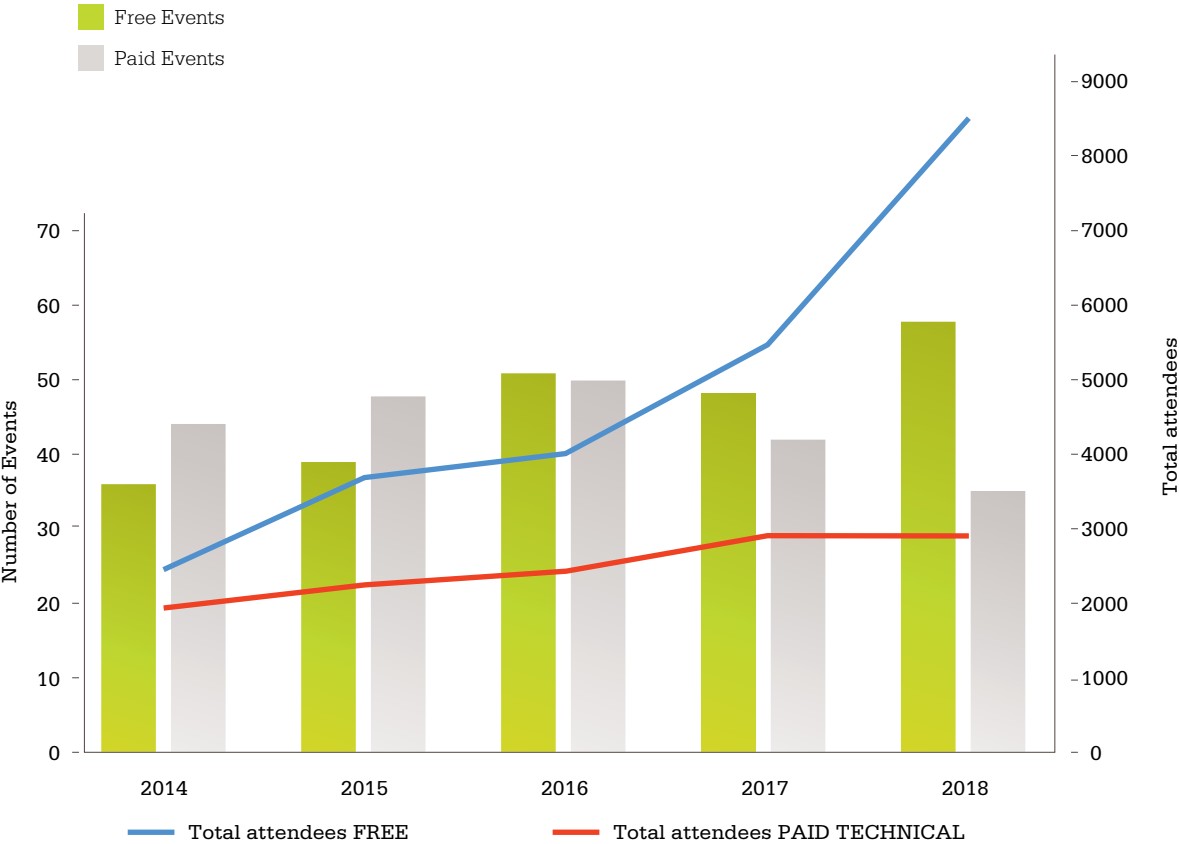


Chart 3. Number of Events/Engagement 2014–2018



In 2018 we:

- Started to offer Apprenticeship End Point Assessments in partnership with EAL, with nearly 150 individual assessments delivered.
- We grew our membership in our paying grades from 69,148 to 69,977.
- Retained South East Asia as a key area of focus, with Hong Kong continuing to go from strength-to-strength with the highest number of corporate and paying members outside the UK.
- Increased UK regional membership surgeries, open “get registered” presentations and Member to Fellow workshops to 120 in 2018 (a 13.2% increase on 2017).
- Delivered 185 MPDS / SRS supported activities including mentor training, graduate induction & support towards application, an 18.6% increase on 2017.
- Re-launched Professional Engineering magazine and replaced the PE app, (with a version that provides live updates of daily content using a newsfeed from the website).
- Achieved a total of 86,449 delegates attending our member-organised events in 2018, (8% above the target of 79,534).
- Enabled 473,577 downloads from the virtual library, (a 17% increase against last year). Over 300 new perpetual ebooks have been made available, and in total 680 members registered for the three library webinars that took place.
- Joined with other PEI libraries to participate in the NBK (National Bibliographic Knowledgebase) project, which aims to create a new union catalogue of all UK academic and specialist libraries.
- Ran a total of 19 D&G webinars, engaging an audience of 2,902. Including sponsored webinars there were 28 webinars in total, engaging 5,303 members and non-members across 55 countries. This equates to an average of 189 attendees per webinar.
- Completed actions as part of the Royal Academy of Engineering diversity and inclusion progression framework including events held in Australia and the UK to promote women in engineering, the creation of online Diversity & Inclusion training, and a Dyslexia & Dyspraxia survey, focus group, and awareness seminar.
- The project to look at closer collaboration between PEIs is paused while the Council becomes more engaged in the process. A joint Trustee Board and Council Steering Group has been created to consider the future PEI landscape, called Project Relevance. It will be the driving force behind the desire for closer PEI collaboration and the strategic thinking required for the Institution to remain relevant in the future.



Barry K.W. NG - CEng, MIMechE

SO 2

Promote Engineering

SO 2.1

Collaborate with Other Key Bodies to Influence Education Policy

Objective

Use research and analysis to drive an evidenced-based debate, working with partners to influence education policy

- **What We Said We'd Do:** Publish a joint report on female technician skill shortages in the UK.
- **Full Year Performance:** ●

SO 2.2

Enable the Next Generation of Engineers to be Smarter, Quicker and Wider Skilled than Ever Before

Objective I

Maintain the Ambassador Programme and a balanced portfolio of outreach activities, including Bloodhound, to support the “Leading the Change” agenda internationally.

- **What We Said We'd Do:** Increase by 5% over 2017 the number of students engaged via UK and international volunteer-supported activities.
- **Full Year Performance:** ●
- **What We Said We'd Do:** Establish initial annual benchmark of students engaged via International volunteer-supported activities.
- **Full Year Performance:** ●

Objective II

Take a leading role in aligning education programmes across the Royal Academy of Engineering, STEM Learning Ltd and Engineering UK during the Year of Engineering 2018.

- **What We Said We'd Do:** Support the transition for Engineering UK to become a ‘thought leading’ grant body rather than an outreach delivery vehicle by year end.
- **Full Year Performance:** ●

SO 2.3

Recognise Past Achievements by Linking them to our Future Goals and Aspirations

Objective I

Engage 5,000 delegates from diverse backgrounds via a heritage outreach programme.

- **Full Year Performance:** ●

Objective II

Engage members in ambassador activity through the appropriate celebration of past engineering achievements internationally.

- **What We Said We'd Do:** Continue to digitise the archive to increase engagement by 5%.
- **Full Year Performance:** ●

Review of performance

The Institution is steadfastly committed to promoting engineering as an industry of choice and developing the next generation of engineers through the work it does with students across the globe.

In 2018 we:

- Published a report on female technician shortages in the UK in September. A roundtable event in Portcullis House was arranged to discuss it alongside our earlier work on ‘Stay or Go’ with support from the Royal Academy of Engineering and IET.
- Engaged 135,250 under 18s via member network activities against an annual target of 117,343. The number of Institution members registered as STEM Ambassadors increased by 877 to 3,779.
- Introduced STEM activities linked to the Student Challenge competitions, which enabled 1,075 local school children to meet the undergraduate / apprentice teams and watch demonstrations.
- Organised an exhibition stand and associated STEM activities at the Great Northern Engineering Experience, attracting 34,020 visitors and participants including more than 12,000 under 18s.
- Completed a major refresh of the Institution's Education Toolkit in December and the new kits will be rolled out in 2019 with a mixture of generic and mechanical engineering activities.
- Took a leading role in the working group to reposition Tomorrow's Engineers, steering the future programme through membership of the Strategy Group. This led to the adoption of the IMechE outreach evaluation tool as the standard across all education programmes including Year of Engineering 2018.
- Linked to the celebration of past engineering achievements to inspire the next generation there were 142,311 archive views, an increase of 60% against last year. The “Engineers at War” (the joint PEI exhibition to commemorate the end of WW1) itself received over 97,000 online views. 1930-39 membership forms were also made live on Ancestry. More than 700 photographs have been digitised this year and similar number of drawings from the Napier collection have also been made available via the Virtual Archive.

Katja Srbijanin IEng MIMechE

The Institution was
the
leading
Professional Engineering
Institution for new
registrations in 2018 for the
7th
consecutive year

SO 3

Inform Opinion

SO 3.1

We will be the Trusted Advisor to the Media to Drive Proactive and Reactive Media Coverage

Objective

- Deliver media and social media coverage commensurate with resources
- **What We Said We'd Do:** 25% increase in digital engagement, through social media, website content, news stories and reports.
 - **Full Year Performance:** ●
 - **What We Said We'd Do:** Media coverage maintained at 2017 levels
 - **Full Year Performance:** ●

SO 3.2

We will be the Trusted Advisor to Employers, Governments, Academic Bodies and Other Institutions

Objective

- Through the deployment of a new Public Affairs strategy and focused Policy Manager team, increase influence with key stakeholders with evidenced, timely and proactive interventions that shape government policy, influences academia and supports employers
- **What We Said We'd Do:** Use the 'Year of Engineering 2018' to create two public affairs events based on IMechE education and skills policy.
 - **Full Year Performance:** ●
 - **What We Said We'd Do:** Produce monthly content promoting engineering to stakeholders under the 'Year of Engineering' campaign, inclusive of the Diversity and Inclusion framework.
 - **Full Year Performance:** ●

SO 3.3

We will Form, and Inform Opinion in the Engineering Arena

Objective

- Support the engineering profession and PEI/RAEng community by implementing the recommendations set out in the Uff Review, encouraging PEI collaboration, growing relevance and pursuing an agenda of merger and consolidation.
- **What We Said We'd Do:** As 1.5: Achieve substantial progress in joint PEI strategic change
 - **Full Year Performance:** ●

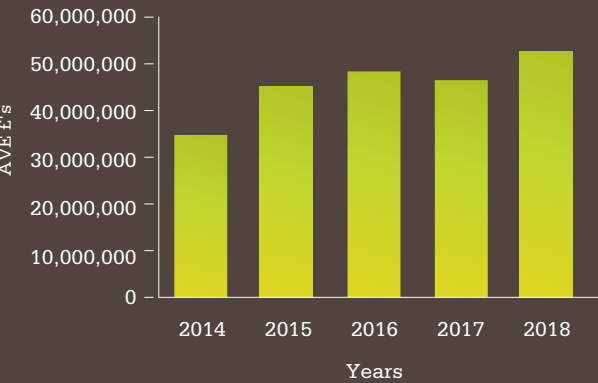
Review of performance

The Institution remains dedicated to keeping the industry updated with news and opinion relevant to the sector, as well as building awareness of the industry in the wider public arena. This is seen as a key strategic objective that will not only help build awareness of the Institution and engineering more generally, but also support future professional registration.

In 2018 we:

- Achieved advertising value equivalent (AVE) of £53.7m in 2018, 12% higher than last year and target. Coverage was spread well across different broadcasting outlets, including Sky News, BBC News, BBC1, BBC2, Channel 4 as well as mentions in the Financial Times, Guardian, Daily Mail, Daily Telegraph and The Times.

Chart 4. Advertising Value Equivalent 2014–2018



- Now have 590,000 followers across our social media channels, up 2.6% from the 575,000 followers at the end of December 2017. Over the course of the year, our social media posts achieved a reach of more than 9 million.
- Achieved two significant events on the education agenda – a round table organised with New Statesman magazine, held in Portcullis House, including Chi Onwurah, shadow Minister for BEIS – and a keynote speech by Stephen Metcalfe MP, the Government's Year of Engineering Envoy at our CHAIN event in Birdcage Walk.
- Published monthly 'Year of Engineering' articles featuring a diverse range of 12 engineers on the Institution website and featured in social media. The Institution has also included them in Institution News, World Bulletin, PE Magazine as well as sharing them externally with other Year of Engineering stakeholders for broader promotion.

Chart 5. Number of social media followers 2014–2018

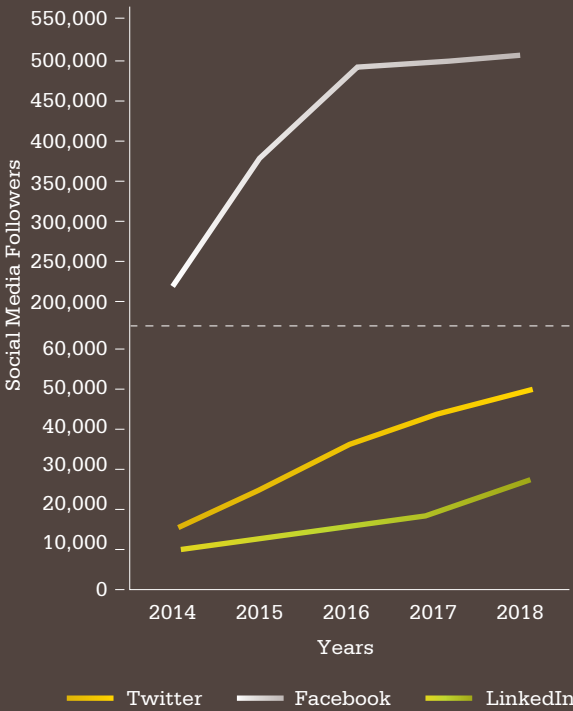
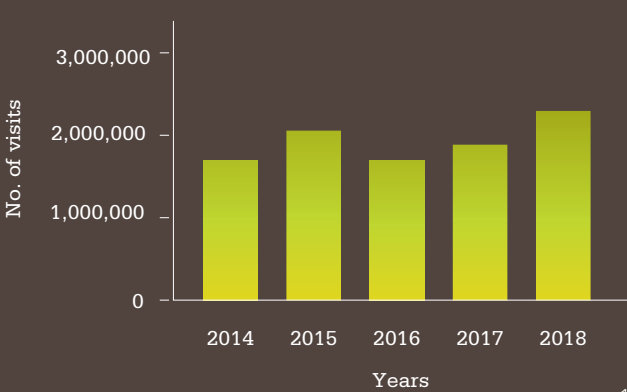


Chart 6. Total Website Visits



Silverstone
played host to over
4,000
students,
7,500
attendees
and over
250
volunteers



SO 4

Encourage Innovation

SO 4.1

Act as an Impulse to Inventions that will be Useful to the World

Objective I

The Technical training programme will evolve to meet the needs of developing engineers, with new courses to develop their skills in emerging, innovative technologies.

- **What We Said We'd Do:** Develop new Professional Development proposition to create an integrated technical events and learning and development programme, with more than three new programmes launched, linked to Industry need.
- **Full Year Performance:** ●

Objective II

Consider the five existing Challenges as a package to increase their collective impact.

- **What We Said We'd Do:** Re-position the Challenges as part of an integrated STEM Challenge programme, achieving financial break-even for each of the four Student Challenges (UAS, Design, HAC, Railway)
- **Full Year Performance:** ●
- **What We Said We'd Do:** As part of the digital transformation, develop an integrated competitor/scrutineer web solution for the combined Challenges, to support the 2019 Challenge competitions.
- **Full Year Performance:** ●

SO 4.2

Continue to Encourage Research, Innovation and Entrepreneurship

Objective I

The TSB will ascertain the value of new technologies when suggesting future policies designed to tackle societal problems and global challenges.

- **What We Said We'd Do:** Working with Expert Members, determine four new technologies to support policy and content creation, deployed across our communications media.
- **Full Year Performance:** ●

Objective II

Increase in joint technical events with other PEIs.

- **What We Said We'd Do:** Develop a minimum of six joint technical events with other PEIs or sector-specific professional associations.
- **Full Year Performance:** ●

SO 4.3

IMechE Continues to Support the Stephenson Fund

Objective I

The Stephenson fund continues to make investments in-line with the approved criteria, promoting the achievements and encouraging the innovative efforts of the beneficiaries.

- **What We Said We'd Do:** Net increase in worth of the fund
- **Full Year Performance:** ●

Objective II

Use the Stephenson Fund as a springboard to Entrepreneurial events.

- **What We Said We'd Do:** Deliver one Stephenson Fund event output in 2018
- **Full Year Performance:** ●

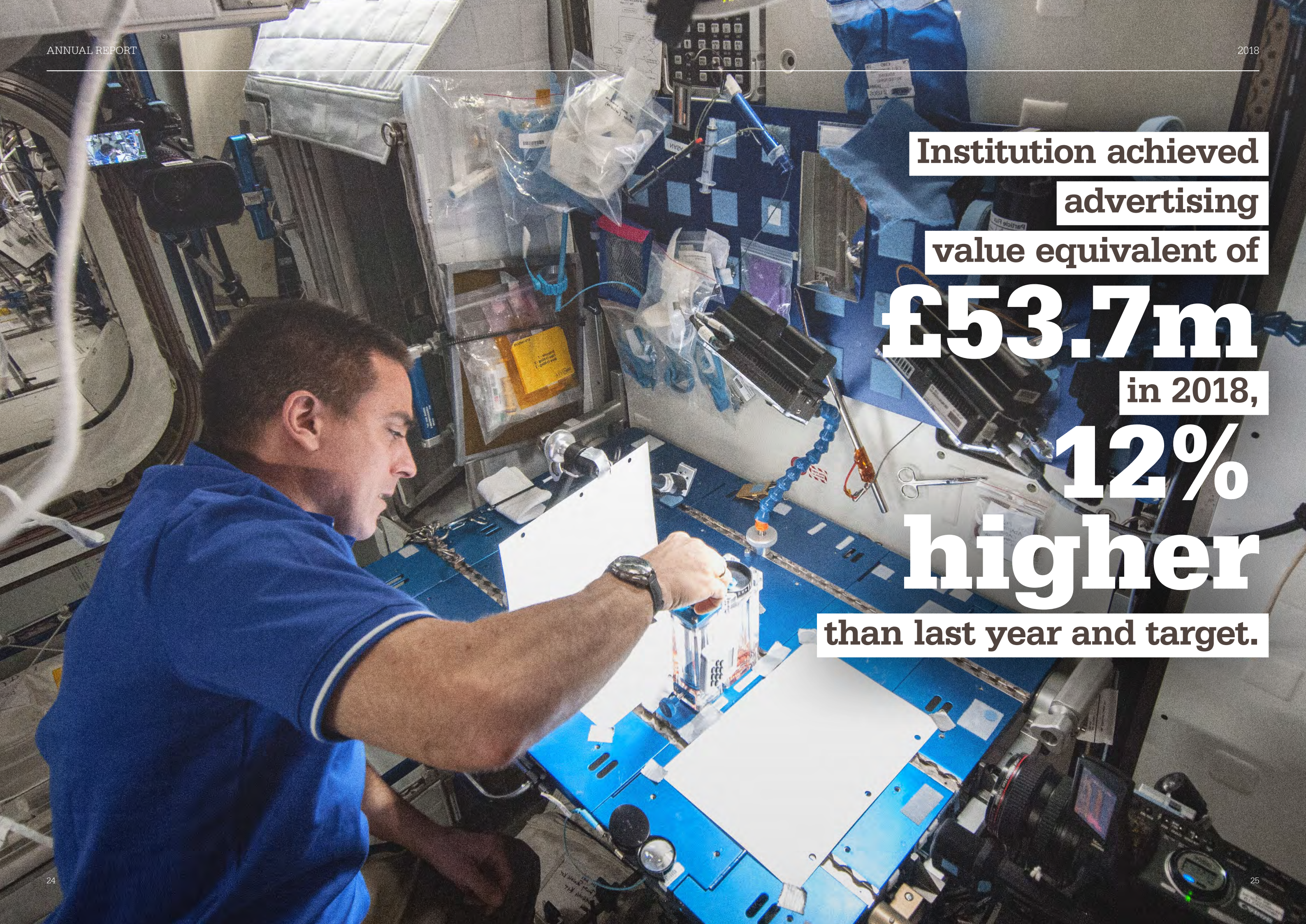
Review of performance

The Institution is dedicated to encourage a thriving and innovative engineering sector in the UK and internationally, and continues to support various funds, challenges and events that are aimed at supporting innovation in the sector.

In 2018 we:

- Continued to grow influence and engagement in Formula Student, The Railway Challenge, the Unmanned Aircraft Systems (UAS) Challenge, the Design Challenge and the Home Automation Challenge. They perform a key role in the Institution's innovation programme, raising the profile of the Institution with students and apprentices who are considering engineering as a career.

- Had another successful year with 127 teams from all over the world taking part in Formula Student. Over five days in July, Silverstone played host to over 7,500 attendees and over 250 volunteers ensuring the event ran smoothly. For the first time ever, the competition included an autonomous class - FS-AI - which featured a purpose-built driverless 'mule' car allowing teams to compete on a common vehicle platform.
- We ran another successful TMMX Awards programme in conjunction with The Manufacturer magazine. The 2018 Manufacturer Of The Year was Accolade Wines who had also won the individual categories of Achieving Customer Value, and Sustainable Manufacturing.
- Released 11 reports and policy statements on key issues in engineering and manufacturing, including:
 - A Breath of Fresh Air: new solutions to reduce transport emissions
 - Healthy Homes: accommodating an ageing population
 - Smart Cities: technology friend or foe?
 - Energy from gas: taking a whole system approach
 - Automation & Autonomy
 - Water – Drought & Flood
 - Engineering & dementia: Intelligent Assistive Technologies
- Once again fulfilled our founding purpose to promote invention and innovation through the Stephenson Fund. As an organisation at the forefront of the engineering profession, we are ideally placed to identify and invest in innovative companies and technologies. Our investments, which are administered by our partner Midven, are not just about providing monetary support, but also about connecting companies to resources, knowledge and an expert network. We provide practical support to entrepreneurs through the work of the Learned Society.
- The Stephenson Fund currently has investments in 10 fledgling companies, making further investments during 2018 in Oxford Space Systems, who are developing deployable structures for satellites; Utonomy, who are developing an actuator and software to enable better control of gas network pressure; and Oxford Flow, who are developing a new generation of valves and pressure regulators for the water and hydrocarbon industries, that promise much greater reliability and lower costs.
- The cost of our investment in the fund was £1.65 million at the end of 2018 (2017 £1.40 million). At the end of 2018 a further investment of £100,000 in Joost, a lightweight marine engine company, was committed, but not yet paid.



Institution achieved
advertising
value equivalent of
£53.7m
in 2018,
12%
higher
than last year and target.

FUTURE PLANS

Although we have the same four strategic objectives as in 2018, we have consolidated our more detailed objectives into a smaller number of broader goals for 2019

SO 1

Develop Engineers

1.1 Be a leading PEI for Professional Registration

We will remain a leader for professional registrations across all grades with the Engineering Council.

1.2 Provide world class products and services to engineers, and employers

We will continue to support mandatory CPD for our registered members as part of a greater emphasis on member retention, through meeting member needs.

1.3 Support contemporary ways of working and cover a broad range of disciplines

We will continue to evolve our global engagement through improved dialogue with members around the world.

SO 2

Promote Engineering

2.1 Collaborate with other key bodies to influence education policy

We will take a leading role in aligning education programmes across the RAEng, STEM Learning Ltd, Engineering UK and Year of Engineering 2018 legacy programme to maximize our collective influence.

2.2 Enable the next generation of engineers to be smarter, quicker and wider skilled than ever before

We will continue to support the Ambassador programme with improved STEM activities to deliver the 'Leading the Change' agenda.

SO 3

Inform Opinion

3.1 We will form and inform opinion to drive influence

We will develop a clear measure of our impact on opinion and influence (not Advertising Value Equivalent).

3.2 We will be the trusted advisor to employers, governments, academic bodies, and other institutions

We will use research and analysis to drive evidence based debate working with members and partners.

SO 4

Encourage Innovation

4.1 Act as an impulse to inventions that will be useful to the world

We will develop new events that stimulate innovation.

4.2 Continue to encourage research, innovation and entrepreneurship

We will continue to expand the influence of the 'challenges' programme for our young members.

STRUCTURE, GOVERNANCE AND MANAGEMENT OF THE CHARITY

The Institution is governed by a Trustee Board which is composed of members of the Institution. Details of members who served as trustees during 2018 can be found in the Legal and Administrative section of this document.

Reporting to the Trustee Board either directly or indirectly are Council and a number of boards and committees that are concerned with particular areas of the Institution's activities. These boards and committees are composed of members of the Institution with a specific interest or knowledge in the relevant activity. The focus of the Learned Society is based around the Institution's Divisions and Groups whose role is to advise and coordinate on technical strategy and activity.

Regionally, the Institution has a structure to organise activities on a local basis, each Region having its own committee and chair. In addition, there are also a number of Divisional Centres, which are local groupings of members with an interest in a specific sector of mechanical engineering, e.g. railway, automotive.

Members give their time to the Trustee Board, Council, other boards and committees on a purely **voluntary basis**. While the success of the Institution is dependent on the efforts of its members, it is important that their work is supported by a well-trained and professional staff. The Chief Executive is responsible to the Trustee Board for

organising the employees of the Institution.

CHARITY COMMISSION CODE OF GOVERNANCE

The Institution takes its governance responsibilities seriously and, as a large charity, aims to have a governance framework that is fit for purpose, compliant and efficient. Following the Special Meeting in 2018 a governance review is underway which will address all aspects of governance including compliance with the Charity Commission code. This will report to the Trustee Board in 2019.

INTERNAL CONTROL

The systems of internal control are designed to provide reasonable, but not absolute, assurance against material misstatement or loss. The Trustee Board has in place wide ranging measures to identify and manage risk. This is also being reviewed as part of the governance review noted above.

EMPLOYEE ENGAGEMENT

The Trustee Board recognises that one of the key factors in the current and future success of the Institution is the relationship between members and employees.

The Institution is an equal opportunities employer which aims to recruit a diverse range of talented people. It recognises that future success depends on the skills, professional fulfilment and continuing development of all employees. The Institution holds a silver accreditation by Investors in People, which was successfully renewed in 2018, despite being assessed against a new and significantly more challenging standard.

A formal employee engagement forum operates with representatives from all departments to take the lead on identifying and addressing issues affecting employee engagement.

Employees are regularly consulted on issues of concern to them, with regular forums for staff and management levels. Staff are provided with full job descriptions, a handbook on employment policies and procedures, written guidance on financial and grievance procedures, and access to job-related training.

ARRANGEMENTS FOR SETTING THE PAY AND REMUNERATION OF KEY PERSONNEL

The remuneration of senior management at director level and above is reviewed and approved annually by the Remuneration Committee. The Committee ensures arrangements are affordable and fair, and designed to motivate and reward performance in the interests of the Group. Remuneration is benchmarked periodically using external surveys and data which include both commercial and not-for-profit organisations.

IMPORTANCE OF THE EFFORTS OF UNPAID VOLUNTEERS AND PROVISION OF FREE FACILITIES

As explained in the section on the organisation of the charity, the Institution is dependent upon the efforts of unpaid members throughout its structure for its governance and for most of its activities both revenue generating and otherwise. However, the Institution does pay for most of the facilities that it uses - particularly at national level. Locally, in the Regions and Centres, there is some dependence on the provision of free facilities to hold meetings.

PUBLIC BENEFIT STATEMENT

The Trustees confirm that they have complied with the duty in Part 1, Section 4 of the Charities Act 2011 to have due regard to the Charity Commission's general guidance on public benefit, 'Charities and Public Benefit'.

The Institution's charitable purpose is enshrined in its objects as described above. The Trustees ensure that this purpose is carried out for the public benefit by delivering services that are valued by our members and setting standards of achievement for Engineers, thereby engendering public confidence and trust. Membership is open to people who are pursuing a career or have an interest in Mechanical Engineering.

The Institution actively pursues the development of debate and action on topics for the betterment of society that relate to Mechanical Engineering. These topics are detailed in the Trustees Report. The Institution provides free literature, free lectures and free access to the library to encourage members of the public to engage in the improvement of the world through Engineering.

RISK MANAGEMENT

Risks are identified and managed through a formal risk register which is considered twice a year by the Audit and Risk Committee. New members of the Trustee Board go through an induction process to familiarise them with their role in the Institution and their legal responsibility as a charity trustee, and are provided with the opportunity for on-going training. Staff with appropriate professional qualifications are employed in key posts. Independent professional advice is used in areas such as charity law, investment management, freehold land and buildings, staff pension scheme, governance and elsewhere as appropriate. Comprehensive insurance cover designed after consultation with our broker and insurance providers is in place to meet the risk profile of the Institution.

The Board of Trustees has overall responsibility for risk management and internal control. It regularly reviews the processes in place for managing risk to ensure they are robust and operate effectively throughout the Institution. Comprehensive risk registers are maintained at all levels and regularly reviewed.

RISK APPETITE STATEMENT 2018

1. Introduction

Our Risk Appetite Statement describes the total impact of risk the Institution is prepared to tolerate in the pursuit of its strategic objectives. It reflects:

- Our duty of care.
- Our long-term strategy, business plans and member expectations.
- Our charitable principles and our Royal Charter.
- Our willingness and capacity to take on risk.
- The practicalities, skills and resources required to manage and monitor risk within the Institution.
- Our tolerance for loss or negative events that can be reasonably quantified.
- Periodic review with regard to evolving industry and market conditions.
- The collective approval of the Trustee Board.

2. Our approach

The Institution's approach is to manage the risk that the Institution is exposed to by evaluating risks of all types on a consistent basis. All risks are expressed in financial terms both so that they can be compared in consistent units and so that the financial costs of mitigation can be evaluated in relation to the level of risk. Even risks that appear non-financial e.g. reputational risks, can be evaluated in financial terms by considering the potential impact on member recruitment and retention, the legal or PR costs we might incur trying to address the reputational issue, or the impact on staff engagement and turnover leading to higher recruitment and training costs and lower productivity.

Acceptance of risk is subject always to ensuring that potential benefits and risks are fully understood at appropriate, pre-defined levels, before activities are authorised, and that sensible measures to mitigate risk are established.

Our appetite for risk is inextricably linked to our capability to manage it. The Institution operates pragmatic processes, commensurate with its size and resources, for the identification, evaluation and management of risk that threaten the achievement of its strategic objectives. It records them in the Institution risk register, which is monitored by the Trustee Board annually. The Audit and Risk Committee ensures that risks are actively managed within a framework of risk management and delegated authorities, with

the appropriate strategies in place to work effectively. Sub-division and subsidiary company risk registers ensure operational risks are identified and managed. Management oversight and audit support this process and undertakes reviews of key areas throughout the year.

During 2017 the Institution appointed a full-time Chief Risk Officer to lead the risk management and mitigation processes. In late 2018 this post was replaced by a part-time Chief Risk Officer, a qualified solicitor, and a full-time Risk Officer, who was appointed in March 2019.



Luke Hollis CEng MIMechE

3. Major organizational risks

COMPLIANCE AND REPUTATION

GDPR	As a membership organisation we are particularly sensitive to issues relating to data protection and the 2018 GDPR requirements. We have implemented new policies and procedures to address the requirements of the 2018 GDPR legislation and will be expanding this to identify best practice improvements during 2019.
Health & Safety	We have a Health & Safety committee and employ professionally qualified facilities management staff to ensure Health & Safety conformity at all sites. We have regular site inspections and reviews by senior management and a Health & Safety report is reviewed by the Trustee Board.
Cyber-security	This is an area of continuous change as technology evolves. As part of our wider digital transformation we are building cyber security routines into our systems and processes, including penetration testing by external 3rd parties.

OPERATIONS AND CHANGE MANAGEMENT

IT infrastructure	We have completed the majority of our programme to migrate from an on-premises infrastructure to Microsoft Azure cloud platform and this should be complete during the first half of 2019, essentially eliminating our risk in this area.
Digital transformation	We suffered a significant write off in 2018 due to failure of a key supplier to meet our requirements. Following this an advisor with relevant digital skills has been invited to attend the Trustee Board and updates are being provided to every Trustee Board. The pace of the programme (and rate of spend) has been reduced to allow greater control over development activities.

GOVERNANCE AND MEMBERSHIP

Governance	Following the special meeting in 2018 a governance review, led by an experienced independent chair, was established to review all aspects of the way the Institution was run. This will report back in mid-2019.
Continuing relevance to modern engineers	Our registered membership continues to grow. We conduct regular membership surveys and act upon the results. One key objective of the digital transformation programme is that of improving relevance to membership through the provision and delivery of better products and services. We are also investigating approaches to co-ordinate with other professional engineering institutions to improve our joint effectiveness.
Supply of future engineers	In collaboration with the other professional engineering institutions, we engage with government, industry and education to promote and encourage young people to study maths and science at school and pursue engineering paths in further and higher education and training.

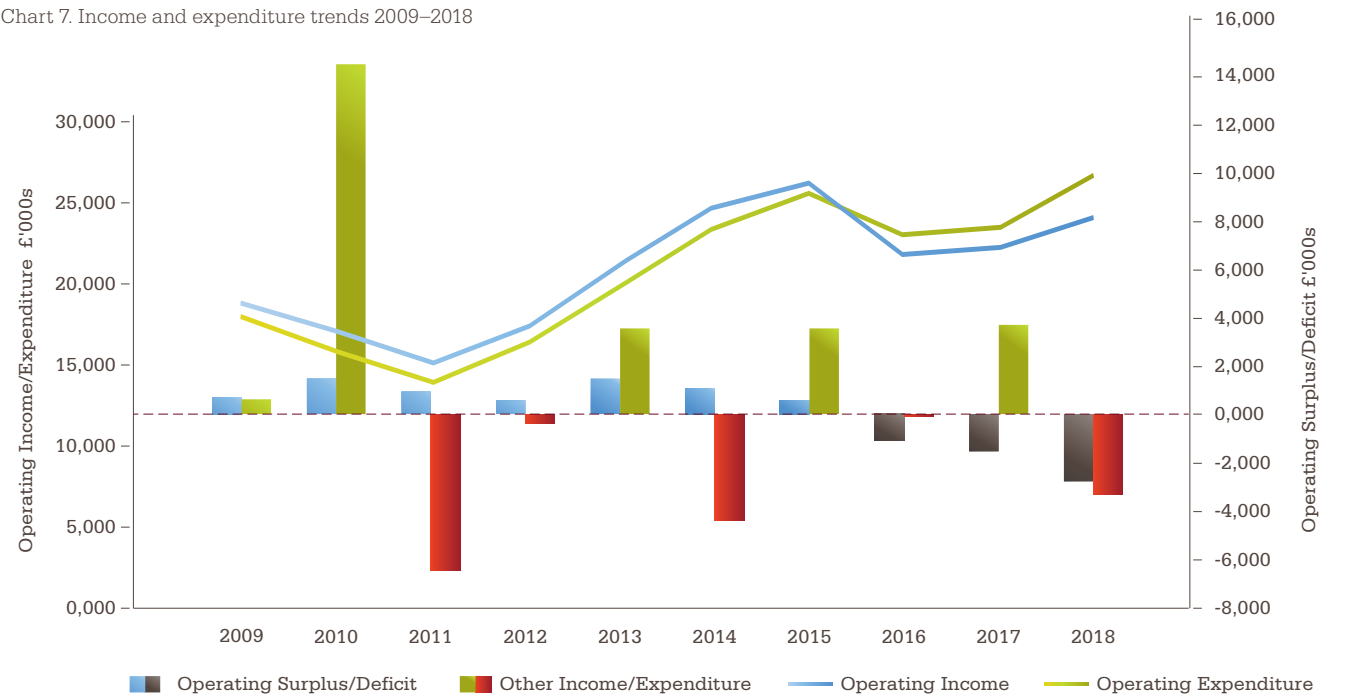
FINANCIAL

Cost of remaining at One Birdcage Walk	As an old building in a conservation area it has very high running costs and requires significant capital expenditure over the next few years due to the poor state of the building fabric. It is too large for our needs and, although excess space is either let to tenants or for short term events, this income does not cover the running costs.
Returns from commercial trading investments	The liquidation of Amber Train in 2017 has highlighted risks in this area and was one of the factors behind the calling of the special meeting in 2018. Following this, a finance review, led by an experienced independent chair, was established to identify the underlying reasons for the recent poor financial performance and make recommendations for improvements. This will report back in mid-2019 although some interim recommendations have already been implemented such as implementation of monthly operating boards for some of the trading entities.

FINANCIAL REVIEW

The key objective in improving the financial position of the Institution is to provide secure financial underpinnings to deliver the Learned Society activities to members. The Institution runs a number of commercial ventures which are pertinent to its core values to help subsidise the charitable purpose. However the problems and subsequent liquidation of Amber Train, and the underperformance of the other trading entities against their targets, has resulted in a decline in reserves. Associated decisions to invest in non-liquid assets, such as the trading companies, Stephenson Fund investments, the freehold property in Sheffield and digital investments have resulted in a much steeper fall in free reserves. Future policy for investing in such non-liquid assest is under review.

Chart 7. Income and expenditure trends 2009–2018

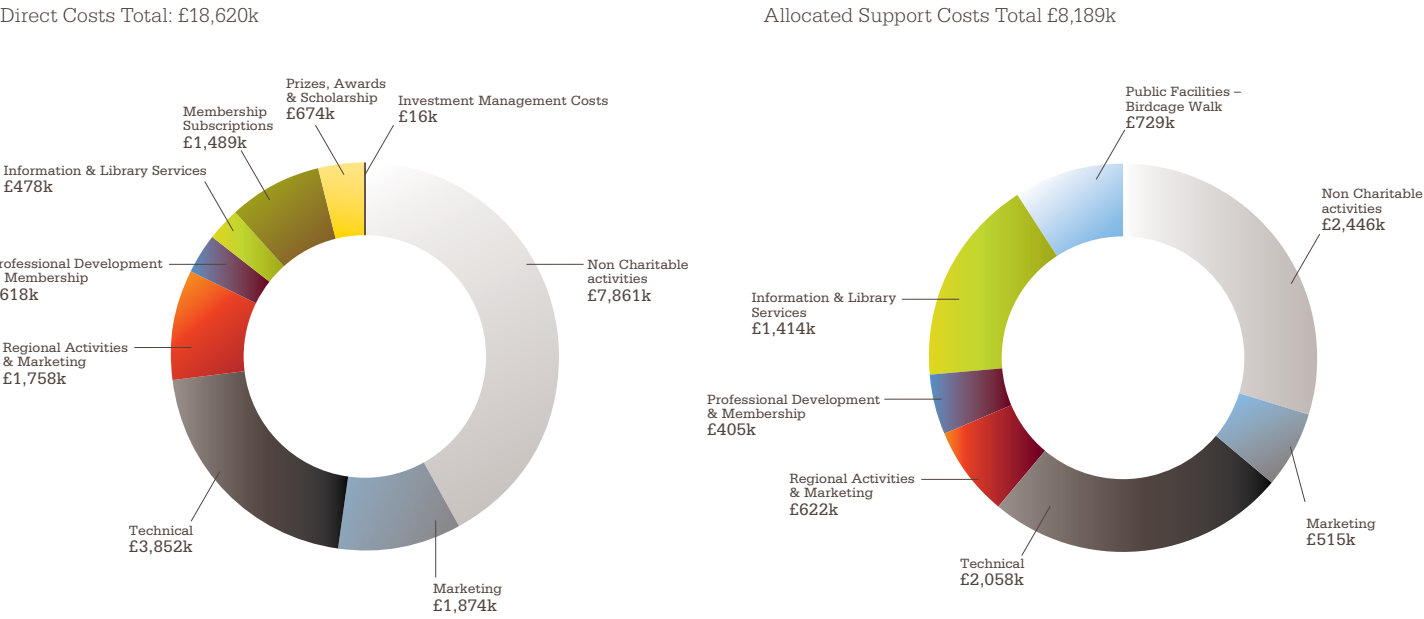


Note: the exceptional profit of £11.2M in 2010 is due to the sale of the publishing business. Until 2015 a regular income was received from our publishing business, including post-sale royalties, of between £1.8M and £2.4M each year. The cessation of this income in 2016 coincided with the decline into operating deficits. This sale led to an increase in overall reserves (shown later). The trend however in the unrestricted contribution to those reserves is also heavily impacted by the movement in the pension fund deficit which varies by £2-4 million per year, based on actuarial valuation factors outside our control. (The pension fund deficit is excluded from the definition of ‘free’ reserves as it is not a short term liability, so there is no similar impact on the trend in free reserves).

RESOURCES EXPENDED

The graphs below set out the resources expended across the various activities of the Institution in 2018 versus 2017.

Chart 8. 2018 Resources Expended



Totals 2018 £26,809k

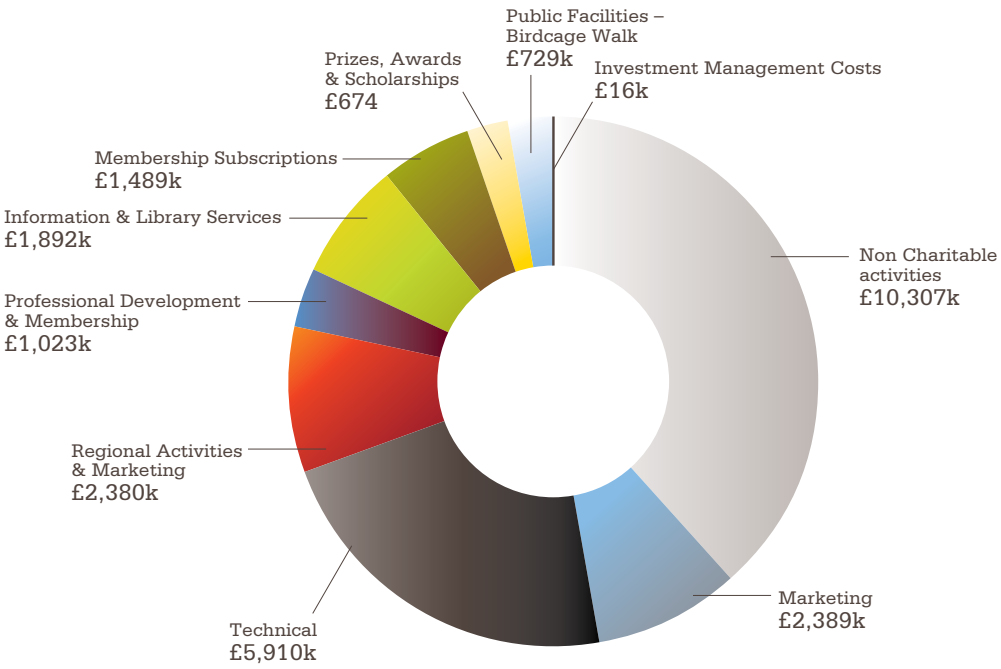
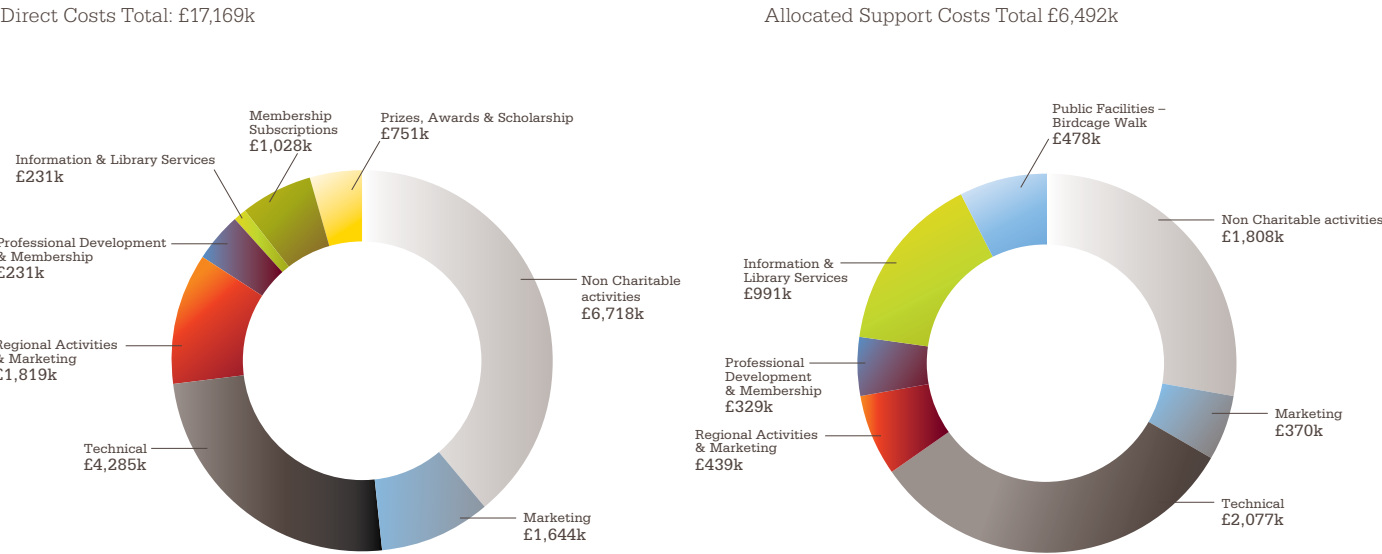
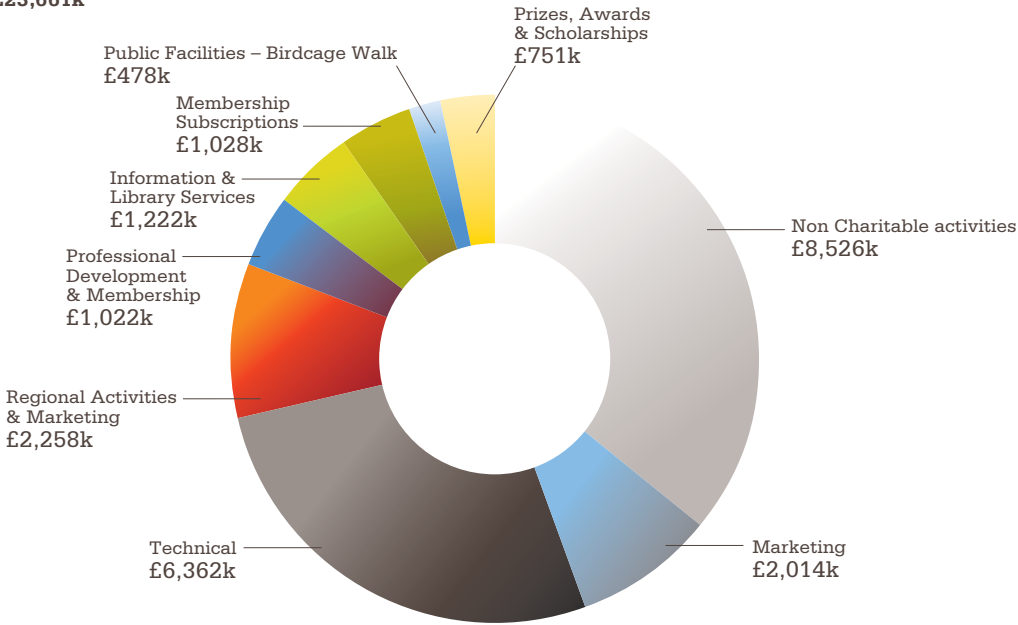


Chart 9. 2017 Resources Expended

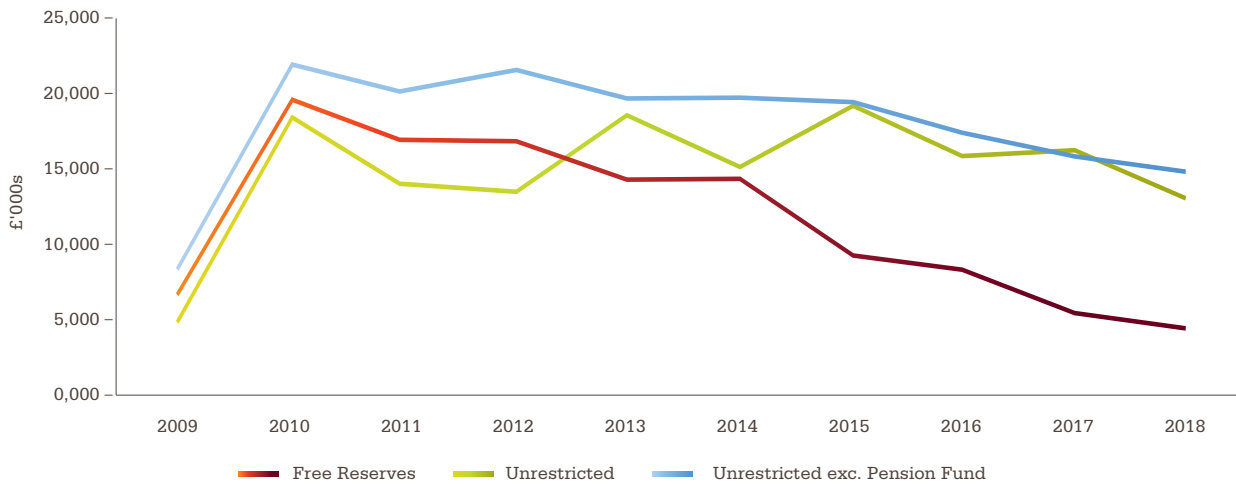


Totals 2017 £23,661k



Charity Reserves

Chart 10. Trends in unrestricted and free reserves 2009–2018



Returning the free reserves to the target is regarded as a medium term objective and is reviewed annually as part of the budgeting process. Capital expenditure will, in the short term, be limited to free cash flow (surplus + depreciation + amortization) and we are investigating whether any non-core assets can be sold.

The trustees consider the lower level of free reserves to be a low risk due to:

- the calculation is on the basis that income falls immediately to zero, which is exceedingly unlikely as subscriptions income is very stable due to the very large number of individual members. In addition, the majority of subscription income is received before, or very early in, the year to which it relates so corrective action could be taken if a material shortfall occurred.
- the Institution has freehold properties which could be used as collateral if cash was needed in the short term while longer term asset realisation and expense reduction activities were undertaken.

As a result of this trend the trustees have adopted a new model, from 2019 onward, that the charity should break even at an operating level before investment gains/losses with any surplus from trading subsidiaries retained. Capital expenditure will also be limited with the intention that it does not exceed the cash generated in the year i.e. the overall surplus plus depreciation or amortisation charged, so that there is no further reduction in free reserves. This policy will be maintained until free reserves return to near the top of the desired range. In addition the trustees are intending to dispose of non-core assets to generate increases in free reserves.

The Trustee Board has adopted a policy on reserves which requires that the level of free reserves, should reflect six months of charitable spend. At 31st December 2018 this calculation is as shown:

	31.12.18	31.12.17
	£000s	£000s
Total Charity funds	24,735	30,885
Endowment funds	(9,013)	(11,635)
Restricted income funds	(3,022)	(3,017)
Pension reserves	1,895	-
Unrestricted funds	14,595	16,233
Less Stephenson Fund investments	(1,650)	(1,400)
Less intangible assets	(2,113)	(2,117)
Less tangible assets	(7,158)	(7,408)
Free reserves	3,674	5,308
Total Expenditure	26,809	23,661
Less: Restricted expenditure	(690)	(751)
Less: Non charitable trading activities	(10,323)	(8,526)
	15,796	14,384
	3 months	4 months

In 2018 overall income rose 9% to £24.0M (2017 - £22.0M). Within that the overall level of income from subscriptions and associated services rose by 5.0%, reflecting the fact that we achieved a net volume growth as well as the normal inflationary price increase. Operating expenditure rose 13% to £26.8M (2017 - £23.7M) resulting in an operating loss of £2.8M (2017: £1.6M). These costs included a number of non-recurring items totaling £2.0M:

- £0.95M write off of digital project costs no longer considered to have any value. £0.73 million of this represented digital costs capitalised during 2017 with the balance being incurred during 2018. This review was triggered by the termination of the contract with our CRM development partner and the re-setting of this project on a new, less ambitious basis. This work identified project flaws, and led to the subsequent decision to terminate the partner relationship.
- £0.88M of costs related to the Special Meeting called during the year and the subsequent management and governance changes and reviews. This includes costs of producing and distributing the meeting documents, costs of the meeting itself, legal advice before and after the meeting, severance costs from the management changes that followed and the costs of supporting the finance and governance reviews in their work.
- £0.20M of costs within Sonaspection relating to a write back of double-counted prior year sales.

Excluding these costs the operating deficit fell to £0.8M (2017 £1.6M)

Non-operating costs included a £1.5M loss on investments due to a decline in the valuation of our listed investments (2017 - £1.8M gain) and a £1.8M actuarial loss (2017 - £2.0M gain) on the pension fund scheme (see note 10 for full details) resulting in an overall net movement of funds of a £6.1M deficit (2017 - £1.4M surplus) for the year.

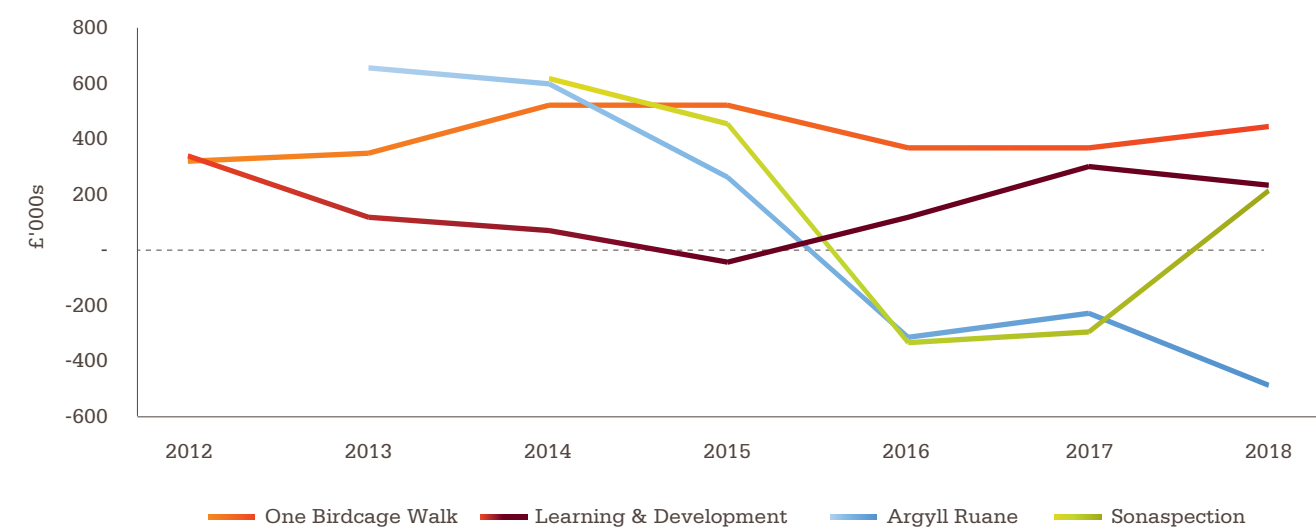
Trading Entities

The governance of the trading companies is the responsibility of the Commercial and Investments Board, chaired by a Vice-President, and reporting to the Trustee Board. The Institution, supported by external professional advice, operates four main trading activities through its subsidiary Professional Engineering Projects Ltd and its sub-subsidiaries: The shared costs and other minor commercial activities were a net cost of £0.24M in 2018, a 47% decline of the £0.45M of costs in 2017 when we incurred significant restructuring charges.

ONE BIRDCAGE WALK	Our Venue Hire business, trading under the One Birdcage Walk brand at our head office continued to grow strongly with turnover up 25% on 2017 to £1.1M and operating profits up 22% to £0.44M. We are moving to a new commission-only model for catering revenue during 2019 so we expect revenue to decline but profitability to be maintained. We also have a very small venue hire business at Sheffield but this contributed only ~2% of total venue hire revenue during 2018.
TRAINING Institution of MECHANICAL ENGINEERS	Our London-based training business had a difficult year in 2018 with sharp declines from its two largest customers due to their own commercial challenges. Despite gaining a number of new customers, and continued growth in our public programme, turnover declined 5% to £1.7M and operating profits were down 23% to £0.24M. We anticipate some recovery in 2019 with growth in both revenue and turnover, although there is some risk from Brexit as we are exposed to manufacturing businesses likely to be heavily impacted by any disruption to EU supply chains.
ARGYLL RUANE Institution of MECHANICAL ENGINEERS	The Sheffield-based non-destructive testing (NDT) training and consultancy business had a very challenging year. A new general manager was appointed in February 2018 and he has addressed a number of long-standing issues that have contributed to underperformance in recent years, but that has led to short term disruption and costs, worsening the results in 2018. Turnover declined 1% to £2.2M but losses increased by 114% to £0.49M. During the year we relaunched the business as IMechE Argyll Ruane, bringing back the trading name it had on acquisition as our research indicated there was still high customer awareness of this name and we were losing business from people who thought it had ceased trading as they did not recognise the link to the new Engineering Training Solutions brand. Despite this result we believe we have turned the corner in the business restructuring and are anticipating a profit in 2019, supported by strong early results from the changes.
SONASPECTION Institution of MECHANICAL ENGINEERS	Our NDT flawed sample business, Sonaspection, based in Lancaster and Charlotte, USA, had a successful year with strong orders from the UK nuclear programme. Turnover increased 27% to £3.1M and profit moved from a loss of £0.16M in 2017 to a profit of £0.21M in 2018. With orders already very strong for 2019 we anticipate growth in both turnover and profits. The current site in Lancaster is being extended in 2019 to improve health & safety, quality and capacity.

Overall our trading entities had a turnover of £8.1M (2017 £7.3M) and an operating profit of £0.2M (2017 loss of £0.2M) as restated) at budgeted exchange rates. This is slightly different from the amounts shown in the Consolidated Income Statement due to foreign exchange differences and consolidation adjustments as the trading entities have some transactions with the charity e.g. the Sheffield building is rented by PEP from the charity. The trading entities are managed through a Commercial and Investment Board, chaired by a Vice President but also with external professional advice. The Board approves both the annual operation plan and three year strategic plan for each business.

Chart 11. Commercial trading entities profit & loss trends 2012–2018



The above chart shows unaudited management account by entity. The shared costs are excluded from this. One Birdcage Walk is not an acquisition, but the other three are all shown from the first full year of ownership. The Sonaspection results are restated, reflecting the prior year adjustment noted on Note 2 of the accounts. At the date of signing, all entities are ahead of budget for the first three months of 2019 (unaudited management accounts).

Balance Sheet

Our investments declined to £18.0M (2017 - £22.5M) partly from an underlying £1.5M loss on investments and partly as £3.0M was realised to fund the operating deficit. We continued to invest in early stage innovation companies until November 2018, in line with our charitable aim of being an impulse to innovation through the Stephenson LLP fund. At year end we had invested £1.65M in 10 companies (2017 £1.4M in 9 companies).

Within that we committed to one investment, which could not be made until early 2019, but further investment is on hold until free reserves have returned to target.

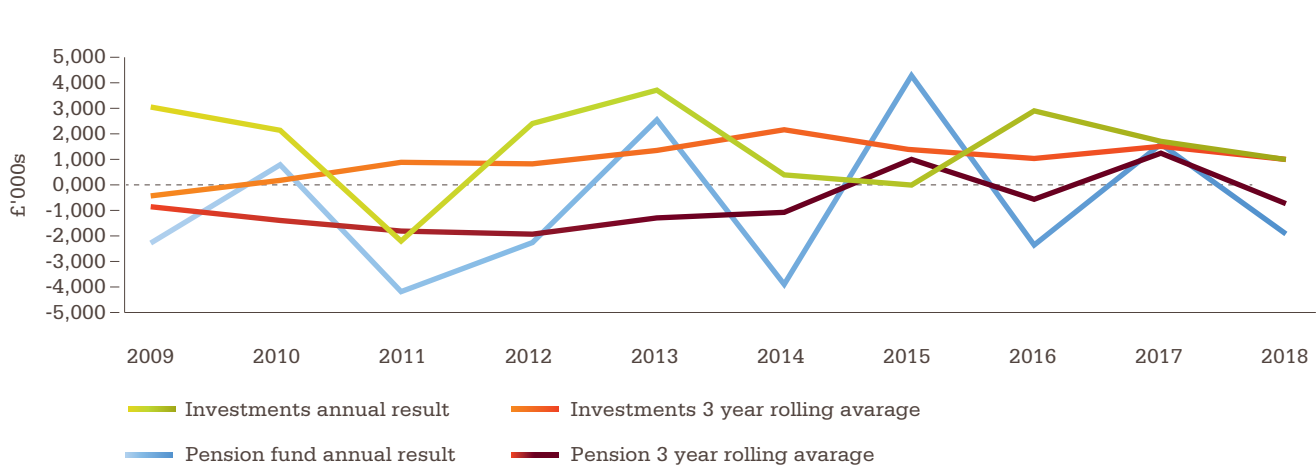
Intangible assets are stable at £2.1M (2017 - £2.1M). Although we continued to invest in our digital transformation programme we suffered a setback when our CRM programme failed to meet project milestones and we took the difficult decision to terminate the relationship with our primary technology partner. This resulted in a write-off of £0.95M of costs from that overall workstream as we restarted the CRM programme at a slower pace under internal project management.

Tangible fixed assets decreased by £0.25M to £7.2M as investments of £0.5M were lower than depreciation charged in the year.

Due primarily to poor investment performance in the year, the pension fund, which was in slight surplus at the end of 2017 moved to a deficit of £1.8M. £0.3M of this related to the implementation of GMP equalisation following the Lloyds court judgement in 2018. The sensitivity of this fund is such that a 0.5% movement in interest rates leads to a £5.0M increase in pension liabilities. The aim of the Trustees of the Pension fund and the Institution is to transfer the total risk to an acceptable financial vehicle, such as an insurance company, in the medium-term.

Due to the £6.2M overall decrease in funds, group reserves decreased from £30.9M in 2017 to £24.7M. The Institution continues to remain financially sound. The Trustee Board is committed to maintaining financial prudence and in particular making an overall surplus and increasing free reserves.

Chart 12 . Investment and pension fund gains & losses 2009–2018



Degree of financial dependency

The Institution is dependent on the voluntary efforts of its members. However, there is no significant degree of dependence on any single member or small group of members in respect of voluntary effort or financial contributions.

Income from events and publications is also derived from a large number of independent sources. However, the success of these activities is dependent on the general state of the economy.

Availability and adequacy of assets

The Trustee Board considers that there are sufficient assets available to meet the foreseeable requirements of all the Funds within its control.

We have financial goals for 2019 to deliver an overall operating surplus for unrestricted activities at the 'Net income/(expenditure) before gains/(losses) on investment assets' level in the consolidated income statement and to at least maintain free reserves.

Summary of funds and investments

General

A description of all the various funds included within the Institution's accounts is provided below.

Investment policy and returns

The Trustee Board has established an investment policy which is reviewed on an annual basis. The policy includes the following principles:

1. A diversity of investments will be held, in so far as is appropriate to the fund concerned. This may be achieved via a pooled investment vehicle like a unit trust or investment trust.
2. Investment policy will be appropriate to the needs of the fund.
3. Appropriately authorised investment managers will be employed.
4. Appropriately authorised nominees may be employed to hold individual stocks and shares.

The investment managers work towards the following objectives:

Reserve Fund, General Trust & James Clayton

Target asset allocations have been set for each fund with the objective of outperforming the relevant composite benchmark by 0.5% over rolling three year periods. The composite benchmark being calculated using the asset allocations and an appropriate index for the asset class.

Other Trusts

Funds are invested in special pooled funds restricted to charity use. It is not appropriate to set individual objectives for these investments. However, performance is compared against statistics prepared by the IM company.

A summary of the total annual rates of return (income and capital) achieved on investments during 2018 is as follows:

	Return Year to 31.12.18	Return Year to 31.12.17
	%	%
Reserve Fund	(5.9%)	11.9%
General Trust	(4.1%)	8.7%
James Clayton Trust	(4.3%)	8.8%
Charities Official Investment Fund income units	1.2%	13.14%
Whitworth Scholarships Fund – Charishare	(9.9%)	14.48%
Whitworth Scholarships Fund – Charinco	(0.4%)	2.70%

Further details of the size and movements of these funds are shown in Note 18.

Statement of Trustees’ responsibilities in respect of Trustees’ annual report and the financial statements

Under the trust deed and rules of the charity and charity law, the trustees are responsible for preparing the Trustees’ Annual Report and the financial statements in accordance with applicable law and regulations.

Charity law requires the trustees to prepare financial statements for each financial year. The trustees have

elected to prepare the financial statements in accordance with FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland.

The group and charity’s financial statements are required by law to give a true and fair view of the state of affairs of the group and the charity and of the group’s excess of income over expenditure for that period.

In preparing these financial statements, generally accepted accounting practice entails that the trustees:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards and the Statement of Recommended Practice have been followed, subject to any material departures disclosed and explained in the financial statements;
- state whether the financial statements comply with the trust deed and rules, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the group and the charity will continue in business.

The trustees are required to act in accordance with the trust deed and the rules of the charity, within the framework of trust law. They are responsible for keeping proper accounting records, sufficient to disclose at any time, with reasonable accuracy, the financial position of the charity at that time, and to enable the trustees to ensure that, where any statements of accounts are prepared by them under section 132(1) of the Charities Act 2011, those statements of accounts comply with the requirements of regulations under that provision. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the charity and to prevent and detect fraud and other irregularities.

The trustees are responsible for the maintenance and integrity of the financial and other information included on the charity’s website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Fundraising

The charity had no fundraising activities requiring disclosure under S162A of the Charities Act 2011.

Disclosure of Information to Auditor

The Trustees who held office at the date of approval of this Trustees’ report confirm that, so far as they are each aware, there is no relevant audit information of which the Institution’s auditor is unaware; and each Trustee has taken all the steps that he/she ought to have taken as a Trustee to make himself/herself aware of any relevant information and to establish that the Institution’s auditor is aware of that information.

The financial statements have been prepared in accordance with the accounting policies set out in the notes to the accounts and comply with the charity’s governing documents, the Charities Act 2015 and Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland published on 16 July 2014.

The annual report was approved by the Trustee Board on 24 April, 2019 and was signed on its behalf by:


A Roche, President


P Peel, Honorary Treasurer



Investment in the
Stephenson Fund was
£1.65m
at the end of
2018

INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE INSTITUTION OF MECHANICAL ENGINEERS

Opinion

We have audited the financial statements of the Institution of Mechanical Engineers for the year ended 31 December 2018 which comprise the Consolidated Statement of Financial Activities, the Consolidated and Institution Balance Sheets, the Consolidated Cash Flow Statement and notes to the financial statements, including a summary of significant accounting policies. 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).

In our opinion the financial statements:

- give a true and fair view of the state of the group's and of the parent charity's affairs as at 31 December 2018 and of the group's incoming resources and application of resources, including its income and expenditure for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

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 in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the trustees' use of the going concern basis of accounting in the 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 or the parent charity'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.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and 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 this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 require us to report to you if, in our opinion:

- the information given in the financial statements is inconsistent in any material respect with the trustees' report; or
- sufficient accounting records have not been kept by the parent charity; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit

Responsibilities of trustees

As explained more fully in the trustees' responsibilities statement set out on page 38, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the group's and the parent charity'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 charity or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

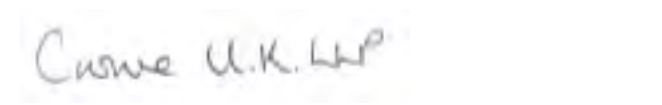
We have been appointed as auditor under section 151 of the Charities Act 2011 and report in accordance with the Act and relevant regulations made or having effect thereunder.

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.

Use of our report

This report is made solely to the charity's trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.



Crowe U.K. LLP
Statutory Auditor
London

Date 1st May 2019

Crowe U.K. LLP is eligible for appointment as auditor of the charity by virtue of its eligibility for appointment as auditor of a company under section 1212 of the Companies Act 2006.

CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES

YEAR ENDED 31 DECEMBER 2018

					2018	2017
	Notes	Unrestricted Funds	Restricted Funds	Endowment Funds	Total	Total
Income and Endowments from:		£'000	£'000	£'000	£'000	£'000
Donations and Legacies		208	-	-	208	10
Charitable activities						
Membership subscriptions		11,888	-	-	11,888	11,319
Technical		2,248	-	-	2,248	2,005
Professional development & Membership		162	-	-	162	153
Information & Library services		5	-	-	5	5
Marketing & Regional		203	-	-	203	-
Other trading activities						
Venue hire, Training, Learning & Development		7,981	-	-	7,981	7,261
Publishing Royalties		2	-	-	2	5
Investments						
Interest & Dividends	13	125	481	-	606	652
Other						
Rents Receivable		684	-	-	684	639
Total		23,506	481	-	23,987	22,049
Expenditure on:						
Raising funds						
Non-charitable trading activities		10,307	-	-	10,307	8,526
Investment management costs		-	16	-	16	-
Charitable activities						
Technical		5,910	-	-	5,910	6,362
Marketing		2,389	-	-	2,389	2,014
Regional activities		2,380	-	-	2,380	2,258
Professional development & Membership		1,023	-	-	1,023	1,022
Information & Library Services		1,892	-	-	1,892	1,222
Membership subscriptions		1,489	-	-	1,489	1,028
Public facilities - Birdcage Walk		729	-	-	729	478
Prizes, Awards and Scholarships		-	674	-	674	751
Total	3	26,119	690	-	26,809	23,661
Net income/(expenditure) before gains/ (losses) on investment assets		(2,613)	(209)	-	(2,822)	(1,612)
Net Gains /(losses) on investment assets	13	(278)	-	(1,219)	(1,497)	1,788
Net income/(expenditure) before amortisation of goodwill		(2,891)	(209)	(1,219)	(4,319)	176
Amortisation of goodwill		-	-	-	-	(202)
Net (expenditure)/income		(2,891)	(209)	(1,219)	(4,319)	(26)
Transfers between funds	18	1,189	214	(1,403)	-	-
Amounts written off in respect of Amber Train Limited	23	-	-	-	-	(583)
Actuarial gains/(losses) on defined benefit pension scheme	10	(1,831)	-	-	(1,831)	2,035
Net movement in funds		(3,533)	5	(2,622)	(6,150)	1,426
Reconciliation of funds						
Total funds brought forward		16,233	3,017	11,635	30,885	29,459
Total funds carried forward	18	12,700	3,022	9,013	24,735	30,885

The notes to the accounts numbered 1 to 24 form part of these accounts.

Consolidated Balance sheets					
	Notes	Group		Institution	
		2018	2017	2018	2017
Fixed assets		£'000	£'000	£'000	£'000
Intangible assets	11	2,113	2,117	2,113	2,117
Tangible assets	12	7,158	7,408	6,314	6,511
Investments	13	17,958	22,496	12,079	15,864
Total fixed assets		27,229	32,021	20,506	24,492
Current assets					
Stocks		446	385	-	-
Debtors	14	4,489	4,504	9,461	9,186
Cash at bank and in hand	15	2,782	2,373	1,597	1,307
Total current assets		7,717	7,262	11,058	10,493
Liabilities					
Creditors: amounts falling due within one year	16	(8,316)	(8,398)	(7,573)	(7,700)
Net current assets or liabilities		(599)	(1,136)	3,485	2,793
Total assets less current liabilities		26,630	30,885	23,991	27,285
Defined benefit pension scheme liability	10	(1,895)	-	(1,895)	-
Net assets including pension liability	18	24,735	30,885	22,096	27,285
The funds of the charity					
Endowment funds		9,013	11,635	7,194	6,780
Restricted income funds		3,022	3,017	456	812
Unrestricted funds		14,648	16,233	16,341	19,693
Pension reserves		(1,895)	-	(1,895)	-
Total unrestricted funds		12,700	16,233	14,446	19,693
Total charity funds	18	24,735	30,885	22,096	27,285

The financial statements were approved by the Trustee Board on 24 April 2019 and were signed on its behalf by:



A Roche, President



P Peel, Honorary Treasurer

The notes to the accounts numbered 1 to 24 form part of these accounts.
Charity registration Number: 206882

Consolidated statement of cash flows	Notes	2018	2017
		£'000	£'000
Cash flows from operating activities:			
Net cash provided by / (used in) operating activities	21	(1,673)	(752)
Cash flows from investing activities:			
Dividends, interest and rent from investments	13	606	652
Purchase of property, plant and equipment	12	(515)	(934)
Purchase of investments	13	(7,363)	(481)
Purchase of intangible assets	11	(1,050)	(1,520)
Proceeds from sale of investments	13	10,360	4,022
Cash awaiting investment	15	44	(11)
Net cash provided by investing activities		2,082	1,728
Change in cash and cash equivalents in the reporting period		409	976
Cash and cash equivalents at the beginning of the reporting period	15	2,373	1,395
Change in cash and cash equivalents due to exchange rate movements		(2)	2
Cash and cash equivalents at the end of the reporting period	15	2,782	2,373

NOTES TO THE ACCOUNTS

YEAR ENDED 31 DECEMBER 2018

1. Accounting Policies

The Charity is registered with the Charity Commission (registered number: 206882), domiciled in the UK and is a public benefit entity and incorporated by Royal Charter in 1930. The address of the registered office is 1 Birdcage Walk, London, SW1H 9JJ

a) Basis of accounting

The Institution meets the definition of a public benefit entity under FRS102 and the financial statements have been prepared in accordance with the Statement on Recommended Practice: Accounting and Reporting by charities preparing their accounts in accordance with the Financial Reporting Standard applicable in UK and Republic and Ireland (FRS 102) (“the SORP”) issued on 16 July 2014 and the Charities Act 2011 and UK General Accepted Practice as it applies from 1 January 2015.

The Financial statements have been prepared to give a true and fair view and have departed from the charities (Accounts and Reports) Regulation 2008 only to the extent required to give a true and fair view. This departure has involved following the SORP rather than Accounting and Reporting for Charities: Statement of Recognised Practice (revised 2005) which has been withdrawn.

The annual accounts have been prepared on the historical cost basis of accounting, modified to incorporate the revaluation of investments.

b) Going Concern

The financial statements have been prepared on a going concern basis. The financial statements do not include any adjustments that would result from the group not being able to continue for the next 12 months. In light of the funds available, there are no material uncertainties about the group’s ability to continue as a going concern.

c) Basis of consolidation

Consolidated figures for the Institution and group companies (see note.2 to the accounts) have been included in these financial statements for the year ended 31st December 2018. Companies acquired by the group are consolidated on an acquisition basis i.e. fair values are attributed to the Group’s share of the net tangible assets and where the cost of acquisition (being the fair value of the purchase consideration and the expenses of the acquisition) is greater than the fair values attributable to such net assets, the difference is treated as goodwill.

d) Incoming resources

Income is recognised at the fair value of the consideration received or receivable for goods and services provided in the normal course of business, and is shown net of VAT and other sales related taxes.

With the exception of Membership Income, all incoming resources are included in the SOFA when the Institution is legally entitled to the income and the amount can be quantified with reasonable accuracy.

Legacies and donations are recognised when all the criteria have been met; entitlement when the Institution has been notified of distribution or legacy is received, the value is reliably measured and the likelihood of receiving the legacy is probable.

Membership subscription income is accounted for on the basis of the amount receivable for the year. Accordingly, the amounts received during the year in relation to future years are deferred.

Income from contracts for the provision of professional services (Professional development, Venue Hire, Training, Learning and Development categories) is recognised by reference to the stage of completion when the stage of completion, costs incurred and costs to complete can be estimated reliably. When the outcome cannot be estimated reliably, income is recognised only to the extent of the expenses incurred.

Income from sale of goods is recognised when the significant risks and rewards of ownership of the goods have passed to the buyer, the amount can be measured reliably, it is probable that the economic benefits associated with the transaction will flow to the entity and the costs incurred or to be incurred in respect of the transaction can be measured reliably.

e) Tangible fixed assets

Tangible fixed assets are stated at cost less depreciation.

Depreciation is calculated so as to write off the cost of fixed assets on a straight line over the following useful lives:

Freehold buildings: building improvements	25 or 50 years
Leasehold buildings: building improvements	50 years or the duration of the lease if lower
Furniture and equipment	3 to 5 years
Plant and equipment	5 to 10 years

Fixed assets are regularly reviewed to consider whether they have been impaired and to ensure that the depreciation costs reflect their working life. Expenditure below £1,000 is not capitalised.

f) Goodwill

Goodwill represents the excess of the cost of acquisition of incorporated and unincorporated businesses over the fair value of net assets acquired. It is initially recognised as an asset at cost and is subsequently measured at cost less accumulated amortisation and accumulated impairment losses. Goodwill shall be considered to have a finite useful life, and shall be amortised on a systematic basis over its economic life of five years.

Where there are indications of impairment, an impairment review is undertaken to assess a recoverable amount, which considers a service potential and not cash flows.

g) Website and Digital Transformation costs

Website and digital transformation costs are capitalised when it is probable that the expected future economic benefits that are attributable will flow to the Group and their costs can be reliably measured. Website and Digital Transformation costs are initially recognised at cost and amortised over the expected useful life of five years.

h) Impairment of tangible and intangible assets

At each reporting end date, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. Where it is not possible to estimate the recoverable amount of an individual asset, the company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Intangible assets with indefinite useful lives and intangible assets no yet available for use are tested for impairment annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in SOFA, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Recognised impairment losses are reversed if, and only if, the reasons for the impairment loss have ceased to apply. Where an impairment loss subsequently reverses, the carrying amount of the asset (or cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss, unless the relevant asset is carried in at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

i) Financial assets

The Group has elected to apply the provisions of Section 11 ‘Basic Financial Instruments’ and Section 12 ‘Other Financial Instruments Issues’ of FRS 102 to all of its financial instruments.

Financial assets are recognised in the company’s statement of financial position when the Group becomes party to the contractual provisions of the instrument.

Financial assets are classified into specified categories. The classification depends on the nature and purpose of the financial assets and is determined at the time of recognition.

Basic financial assets are initially measured at transaction price including transaction costs and are subsequently carried at amortised cost using the effective interest method, unless the arrangement constitutes a financing transaction, where the transaction is measured at the present value of the future receipts discounted at a market rate of interest. Other financial assets including investment in equity instruments which are not subsidiaries, are initially measured at fair value, which is normally the transaction price. Such assets are subsequently carried at fair value and the changes in fair value are recognised on the statement of financial activities.

Loan and receivables

Loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as ‘loans and receivables’. Loans and receivables are measured at amortised cost using the effective interest method, less any impairment.

Interest is recognised by applying the effective interest rate, except for short-term receivables when the recognition of interest would be immaterial. The effective interest method is a method of calculating the amortised cost of a debt instrument and of allocating the interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the debt instrument to the net carrying amount on initial recognition.

Impairment of financial assets

Financial assets, other than those held at fair value through profit and loss, are assessed for indicators of impairment at each reporting end date.

Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows have been affected. The impairment loss is recognised in the statement of financial activities.

j) Financial Liabilities

Basic financial liabilities are initially measured at transaction price, unless the arrangement constitutes a financing transaction, where the debt instrument is measured at the present value of the future receipts discounted at a market rate of interest. Other

financial liabilities classified as fair value through profit or loss are measured at fair value.

Other financial liabilities

Other financial liabilities, are initially measured at fair value, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability to the net carrying amount on initial recognition.

k) Investments

It is the Group’s policy to keep valuations of stock exchange listed investments up to date, such that when investments are sold there is no gain or loss arising relating to prior years. As a result the statement of financial activities does not distinguish between the valuation adjustments relating to sales and those relating to continued holdings, as they are together treated as changes in the value of the investment portfolio throughout the year. Investments not listed on a recognised stock exchange are valued at cost, or at the most recent external transactional valuation.

The Charity purchased the building in Sheffield which is occupied by its subsidiaries for the use in the production, supply of goods or services and for an administrative purposes. The building is therefore held at cost less depreciation in the accounts.

Social Investments

The Institution formed a limited partnership with Stephenson LP in February 2014 to make venture capital investments into a portfolio of Companies involved in or associated with young innovative engineering businesses. This investment has a genuine mixed motive because investment is being made both for financial return but also to advance engineering. The investment is held at cost less impairment as its fair value cannot be measured reliably. If there is objective evidence of impairment, then an immediate impairment loss is recognised in the statement of financial activities.

l) Foreign currency

Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of the transaction. All differences are taken to Statement of Financial Activities.

m) Resources expended

Expenditure is included in the Statement of Financial Activities on a accruals basis and is recognised once there is a legal or constructive obligation to transfer economic benefit to a third party, it is probable that

a transfer of economic benefits will be required in settlement and the amount of the obligation can be measured reliably.

n) Stocks

Stocks are included in the financial statements at the lower of cost or net realisable value. Products in intermediate stages of completion are valued at the estimated cost incurred in bringing the products to their present location and condition.

Costs comprise direct material and, where applicable, direct labour costs and those overheads that have been incurred in bringing the stocks to their present location and condition.

Net realisable value is the estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution. The “percentage of completion method” is used to determine the appropriate amount to recognise in a given period. The stage of completion is estimated by the proportion of contract costs incurred for work performed to date compared to the estimated total contract costs. These costs re presented as stocks, prepayments or other assest depending on their nature, and provided it is probable they will be recovered.

o) Retirement benefit

The Charity operates a pension scheme providing benefits based on the final pensionable pay. The assets of the scheme are held separately from those of the charity.to the net carrying amount on initial recognition.

Pension scheme assets are measured using market values. Pension scheme liabilities are measured using a projected unit method and discounted at the current rate of return on a high quality corporate bond of equivalent term and currency to the liability.

The pension scheme surplus (to the extent that it is recoverable) or deficit is recognised in full. The movement in the scheme surplus/deficit is split between operating charges, finance items and, in the statement of total recognised gains and losses, actuarial gains and losses.

Additionally, a stakeholder pension plan has been established for employees who are not eligible to join the defined benefit pension scheme. The Group contributes to the stakeholder pension plan on a monthly basis and charges cost to the Statement of Financial Activities.

p) Leasing and hire purchase commitments

Assets held under finance leases, which are leases where substantially all the risks and rewards of ownership of the asset have passed to the company, and hire purchase contracts, are capitalised in the balance sheet and are depreciated over the hire purchase contracts are included as liabilities in the balance sheet.

g) Critical accounting estimates and judgements

In the application of the accounting policies, the trustees are required to make judgements, estimates and assumptions about the carrying value 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.

The estimates and assumptions which have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities have been outlined below:

Actuarial assumptions in respect of defined benefit pension schemes

The application of actuarial assumptions relating to defined benefit pension schemes is incorporated in the financial statements in accordance with FRS102. In applying FRS102, advice is taken from independent qualified actuaries. In this context, significant judgement is exercised in a number of areas, including future changes in salaries and inflation, mortality rates and the selection of appropriate discount rates.

Bad debt provision

The Group makes an estimate of the recoverable value of trade and other debtors. When assessing impairment of trade and other debtors, management considers factors including the current credit rating of the debtors, the aging profile of debtors and historical experience.

r) Reserves

Unrestricted funds are those available for application against any of the charities objectives. Restricted funds are those only available for certain purposes defined by the provider of the original funds. Permanent endowment funds are those where the original gift may not be spent, only any income on those funds, which is placed into a related Restricted fund. Expendable endowment funds are those where both the income and the original capital may be spent.

2 Net Incoming Resources

The consolidated results for the Institution are presented in the statement of financial activities on page 45. These include the activity of the parent charity, the Institution of Mechanical Engineers, and the activities of its 100% owned subsidiaries. The incoming resources of the Institution alone for 2018 were £15,677,000 (2017: £15,104,000), and resources expended in 2018 were £10,080,000 (2017: £15,187,000). The overall movement in

funds in 2018 was £5,597,000 (2017: £397,000)

Subsidiary Companies

Professional Engineering Projects Ltd, registered in England and Wales (Reg N 01103638), was established by the Institution as an organisation from which it could conduct the majority of its publishing activities, including the magazines that are made available to members. Whilst this main trade was disposed of during 2010, the company continues to carry on trading in non-charitable activities, mainly provision of training to engineers.

The company also has four wholly owned subsidiary companies, IMechE Services Ltd (Reg N 01361114), IMechE Engineering Training Solutions Limited (Reg N 01917207), Siantonas Ball Ltd (Reg N 01655732), Sonaspection Worldwide Limited (Reg N 04891363), all registered in England and Wales. Both IMechE Engineering Training Solutions (previously Argyll-Ruane Limited) Limited and Siantonas Ball Ltd became dormant on 1st January 2014. The active subsidiaries carry on non-charitable trading activities which are consolidated on a line by line basis with the relevant amounts described as “Other non-charitable trading activities” under Incoming Resources and Resources Expended in the Consolidated Statement of Financial Activities.

Sonaspection Worldwide has two wholly owned subsidiary companies, Sonaspection International Limited (Reg N 02050101) registered in England and Wales and Sonaspection Incorporated registered in the United States of America, which carry on non-charitable activities. These activities are consolidated on a line by line basis with the relevant amounts described as “Other non-charitable trading activities” under Incoming Resources and Resources Expended in the Consolidated Statement of Financial Activities.

The whole of the issued share capital of Professional Engineering Projects Ltd (£2) is held by nominees on behalf of the Institution. A summary of the company's consolidated profit and loss account is shown below. Audited accounts are filed with the Registrar of Companies for the individual companies. These figures are subject to the adjustments mentioned above prior to their incorporation in the Consolidated Statement of Financial Activities.

Subsidiary Companies				2018
	PEP	Sona Int'l	Sona Inc	IMechE Services
	£'000	£'000	£'000	£'000
Turnover	4,999	1,961	1,143	16
Cost of sales	(1,797)	(1,081)	(698)	
Gross profit	3,202	880	445	16
Distribution costs		(58)		
Administration costs	(3,245)	(512)	(432)	
Interest payable and similar charges	(11)		(4)	
Profit/(loss) on ordinary activities before tax	(53)	311	9	16
Taxation	-		-	(9)
Profit/(loss) for the year	(53)	311	9	7
Total assets	5,518	4,613	788	80
Total liabilities	(7,965)	(3,329)	(650)	(77)
Total Funds	(2,447)	1,284	138	3

Subsidiary Companies				2017
	PEP	Sona Int'l	Sona Inc	IMechE Services
	£'000	£'000	£'000	£'000
Turnover	4,803	1,512	1,165	
Cost of sales	(1,687)	(1,231)	(900)	(6)
Gross profit	3,116	280	280	22
Distribution costs	-	(30)	-	-
Administration costs	(2,957)	(389)	(691)	-
Interest payable and similar charges	(73)	-	-	-
Profit/(loss) on ordinary activities before and after tax	86	(139)	(161)	22
Total assets	5,456	3,768	760	266
Total liabilities	(7,741)	(2,756)	(455)	(270)
Total Funds	(2,285)	1,012	305	(4)

3 Resources Expended

All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to that category.

For administrative purposes the Institution is divided into a number of directorates and then subdivided into departments. Accounting records permit the costs and

revenues of all departments to be determined accurately.

The classification of costs in the Consolidated Statement of Financial Activities utilises this information to show expenditure broken-down into broad functional areas.

Where costs cannot be directly attributed to a particular heading, they have been allocated to activities on the basis of headcount and floor area.

In this year a number of exceptional items have occurred

which are included in operating expenses. These include a write off of digital transformation costs, double counted sales within Sonaspection, Special Meeting costs and a one-off pension charge from a change in the law.

2018 Resources Expended

	Direct Costs	Allocated Support Costs	Totals 2018
	£000	£000	£000
Non Charitable activities	7,861	2,446	10,307
Marketing	1,874	515	2,389
Investment Management Costs	16	-	16
Technical	3,852	2,058	5,910
Regional Activities & Marketing	1,758	622	2,380
Professional Development & Membership	618	405	1,023
Information & Library Services	478	1,414	1,892
Membership Subscriptions	1,489	-	1,489
Public Facilities – Birdcage Walk	-	729	729
Prizes, Awards & Scholarships	674	-	674
Total resources expended	18,620	8,189	26,809

2017 Resources Expended

	Direct Costs	Allocated Support Costs	Totals 2017
	£000	£000	£000
Non Charitable activities	6,718	1,808	8,526
Marketing	1,644	370	2,014
Investment Management Costs	-	-	-
Technical	4,285	2,077	6,362
Regional Activities & Marketing	1,819	439	2,258
Professional Development & Membership	693	329	1,022
Information & Library Services	231	991	1,222
Membership Subscriptions	1,028	-	1,028
Public Facilities – Birdcage Walk	-	478	478
Prizes, Awards & Scholarships	751	-	751
Total resources expended	17,169	6,492	23,661

2018 Support Costs

Support cost	Non-charitable activity	Marketing	Technical	Regional	Professional Development	Information & Library Services	Public Facilities	Totals 2018	Basis of allocation
	£000	£000	£000	£000	£000	£000	£000	£000	
Governance	775	166	477	204	119	465	250	2,456	Headcount
Finance & Admin	620	133	381	162	95	372	200	1,963	Headcount
IT & digital	733	158	451	192	113	440	237	2,324	Headcount
Facilities	176	28	630	28	55	55	-	972	Floor area
Pension charge/(credit)	142	30	119	36	23	82	42	474	Headcount
Total	2,446	515	2,058	622	405	1,414	729	8,189	

The significant increases in Governance and IT & digital costs can be better understood with reference to the exceptional costs in these areas highlighted in the Financial Review section of the Trustees' Report on page 32.

2017 Support Costs

Support cost	Non-charitable activity	Marketing	Technical	Regional	Professional Development	Information & Library Services	Public Facilities	Totals 2017	Basis of allocation
	£000	£000	£000	£000	£000	£000	£000	£000	
Governance	535	115	329	140	82	321	173	1,695	Headcount
Finance & Admin	428	92	263	112	66	257	138	1,356	Headcount
IT & digital	506	109	311	132	78	304	163	1,603	Headcount
Facilities	324	51	1,154	51	101	101	-	1,782	Floor area
Pension charge/(credit)	15	3	20	4	3	8	4	56	Headcount
Total	1,808	370	2,077	439	329	991	478	6,492	

4 Taxation

The Institution is considered to pass the tests set out in Paragraph 1 Schedule 6 Finance Act 2010 and therefore it meets the definition of a charitable trust for UK income tax purposes. Accordingly, the charity is potentially exempt from taxation in respect of income or capital gains received within categories covered by Part 10 Income Tax Act 2007 or Section 256 of the Taxation of Chargeable Gains Act 1992, to the extent that such income or gains are applied exclusively to charitable purposes.

The charity’s trading subsidiaries are subject to corporation tax; however all of their distributable profits are paid to the Institution under gift aid.

5 Transactions With Members of the

Trustee Board

	2018	2017
Travel and subsistence expenses	£’000	£’000
Total	25	21
Number of members reimbursed	No.	No.
Total	14	12

6 Indemnity Insurance

Indemnity Insurance	2018	2017
	£'000	£'000
Indemnity insurance premiums paid	23	22

During 2018 the Institution paid for three insurance policies, covering professional indemnity, the liabilities of trustees and “directors and officers” liabilities. Cover applies to the Trustee Board, ordinary members involved with Institution affairs and employees.

7 Staff

	2018	2017
Average numbers of staff employed throughout the year:	No.	No.
The Institution of Mechanical Engineers	117	115
Professional Engineering Projects Limited	43	41
Sonaspection International Ltd	15	15
Sonaspection Incorporated	8	7
Total employees	183	178

The above figures do not take into account whether the staff are part-time or full-time.

8 Employment costs

	2018	2017
	£'000	£'000
Salaries, benefits and termination payments	7,960	7,735
Employer's social security costs	780	696
Employer's pension costs	421	413
GMP equalisation costs	317	-
Total	9,478	8,844

GMP equalisation costs relates to a court judgement in the Lloyds case in 2018 which established how certain scheme liabilities should be calculated, causing an increase in costs in the year.

The numbers of employees whose emoluments, excluding employer's pension contributions, exceeded £60,000 are as follows:

	2018	2017
	No.	No.
£60,001 - £70,000	15	13
£70,001 - £80,000	8	4
£80,001 - £90,000	7	-
£100,001 - £110,000	-	2
£110,001 - £120,000	1	-
£130,001 - £140,000	1	1
£140,001 - £150,000	1	-
£190,001 - £200,000	-	1
£200,001 - £210,000	-	1
£240,001 - £250,000	1	-
£410,001 - £420,000	1	-

During the year the cost of employing key management was £1,254,000 (2017: £807,000). The remuneration of key management consists of salary, pension contributions, benefits in kind, national insurance and compensation for redundancy.

Number of Directors in 2018: 5 (2017: 6)

The charity designated five directors as key management personnel.

14 employees were made redundant during the year. The cost of redundancies of £608,000 (2017: £177,000) was paid during the year.

9 Auditor's Remuneration

	2018	2017
	£'000	£'000
Audit fees	53	52
Audit fees in relation to prior year	63	69
Total	116	121

10 Pensions

The Institution operates a defined benefit scheme. A full actuarial valuation was carried out and updated to 31 December 2018, by a qualified independent company of actuaries. The major assumptions used by the actuary are detailed within this note to the financial statements. The scheme is closed to new members with an effective date of 5 September 2002.

A Stakeholder pension plan has been established for employees who are not eligible to join the defined benefit pension scheme. The Institution has agreed to match employee contributions to the Stakeholder plan up to a maximum of 10% of salary. There is an outstanding contribution at the end of the financial year of £141,336 (2017: £70,545).

The pension cost charge for the period represents contributions payable by the Institution to the stakeholder plan and amounted to £1,108,000 (2017: £698,000).

Assumptions

	2018 %	2017 %
Price inflation	3.25	3.20
Pension increases	2.25	3.10
Salary increases	3.75	3.70
Return on Assets	*	*
Discount rate	2.90	2.60

* Equal to the discount rate (in line with FRS102)

Mortality assumptions used in 2017 and 2018 are based upon the S1PxA tables adjusted to reflect the broad wealth characteristics of each member. Future improvements are assumed to be in line with the CMI projection model, assuming improvements have peaked. The long term improvement is assumed to be 1.25% p.a. (2017: 1.25% p.a.), declining at older ages.

The assumptions relating to longevity underlying the pension liabilities at the balance sheet date are based on standard actuarial mortality tables and include an allowance for future improvements in longevity. The assumptions are equivalent to expecting a 65-year old to live for a number of years as follows:

	31/12/18	31/12/17
Male currently age 40	88.9	90.3
Female currently age 40	91.2	92.0
Male currently age 65	87.5	88.6
Female currently age 65	89.7	90.1

Life expectancies are shown for a male member with a pension greater than £13,000 p.a. and a female member with a pension greater than £4,750 p.a.5

Movements in present value of defined benefit obligation	2018	2017
	£'000	£'000
At 1 January	56,020	55,241
Current service cost	160	160
Past service cost	317	-
Interest cost	1,422	1,549
Actuarial (gains)/losses	(1,981)	988
Benefits and expenses paid	(2,869)	(1,918)
At 31 December	53,069	56,020

Movements in fair value of plan assets	2018	2017
	£'000	£'000
At 1 January	56,248	53,262
Interest on assets	1,431	1,493
Employer Contributions	410	160
Return on plan asset less interest	(4,046)	3,251
Benefits paid	(2,869)	(1,918)
At 31 December	51,174	56,248

Analysis of Amount Credited/(Charged) in SOFA	2018	2017
	£'000	£'000
Current service cost	(160)	(160)
Past service cost	(317)	-
	(487)	(160)

The Scheme is a closed scheme and therefore under the projected unit credit method the current service cost would be expected to increase as the members of the Scheme approach retirement.

Analysis of Pension Finance (Cost) / Income in SOFA	2017	2016
	£'000	£'000
Interest on obligation	(1,422)	(1,549)
Interest on scheme assets	1,431	1,493
Interest on effect of asset ceiling	(6)	-
Net cost	3	(56)
Amount charged/(credited) to SOFA (Total operating charge less net return	(474)	(56)

Sensitivity of the value placed on the liabilities

Adjustments to assumptions	Approximate effect on liabilities	
Discount rate decreased by 0.5% p.a.	+ £4,977,000	
Inflation increased by 0.5% p.a.	+ £2,388,000	
Long term rate of mortality improvement increased to 1.5% p.a.	+ £557,000	
Analysis of Gains / (Losses) Recognised in SOFA	2018	2017
	£'000	£'000
Actuarial gains/(losses) on pension scheme assets	(4,046)	3,251
Change in impact of asset ceiling	234	(228)
Actuarial (losses)/gains on Obligation	1,981	(988)
Actuarial gain/ (loss) in Pension Scheme	(1,831)	2,035
Actuarial gain/(loss) in pension plan recognised in SOFA	(1,831)	2,035

Cumulative actuarial losses reported in the statement of total recognised gains and losses for accounting periods ending on 31 December 2017 are £16,477,000 (2016: £18,278,000).

Movement in Deficit During Year	2018	2017
	£'000	£'000
(Deficit) in scheme at 1 January	-	(1,979)
Current service cost	(477)	(160)
Employer contributions	410	160
Net return	3	(56)
Actuarial gain/(loss)	(1,831)	2,035
Actuarial (losses)/gains on Obligation	(1,895)	(988)

History of Experience Gains and Losses

	2018	2017	2016	2015	2014
	£'000	£'000	£'000	£'000	£'000
Experience adjustments on scheme assets	(4,046)	3,251	6,798	(923)	2,559
Present value of scheme assets	51,174	56,248	53,262	46,443	47,547
Experience adjustment on scheme liabilities	1,981	(988)	236	940	(146)
Present value of scheme liabilities	53,069	56,020	55,241	47,070	52,706
Deficit/surplus in scheme	(1,895)	-	(1,979)	(627)	(5,159)

The updated actuarial valuation to 31 December 2018 showed the scheme having a deficit of £1,895,000 (2017: surplus £228,000). The scheme benefits have remained unchanged through the year. The projected unit method was used in the valuation of the fund and the financial assumptions as to growth rate, inflation, pay increases and discount rate are set out above. It is assumed that the current service cost will increase as employees participating in the scheme near retirement age. There were no contributions outstanding at the end of the financial year (2017: £nil).

The Company expects to contribute £410,000 to its defined benefit plans in the next financial year.

11 Fixed Assets - Intangible Assets

Group and Institution	Goodwill	Website and DT costs	Total
Cost	£'000	£'000	£'000
At 1 January 2018	5,232	2,283	7,515
Additions	-	1,050	1,050
Assets write off	-	(952)	(952)
At 31 December 2018	5,232	2,381	7,613
Depreciation			
At 1 January 2018	5,232	166	5,398
Charge for the year	-	102	102
At 31 December 2018	5,232	268	5,500
Net Book Value			
At 1 January 2018	-	2,117	2,117
At 31 December 2018	-	2,113	2,113

Website and Digital Transformation Programme, Platform costs

The intangible assets for the Institution is represented by Website and Digital Transformation (DT) costs. The website development was completed in March 2016 and begun being amortised from April. The majority of DT costs were still an asset in construction at the year end and therefore was not amortised in 2017. Both website and DT costs were purchased and developed by the Institution.

Impairment

Due to a failure by the main contractor to achieve the agreed deliverables by the project milestones the difficult decision was made to terminate the contract. This necessitated a total write off of £952K by this and other contractors and consultants who had worked on the CRM workstream

12 Fixed Assets - Tangible Assets

Group and Institution	Land & Property	Furniture & Equipment	Motor vehicles	Total
Cost	£'000	£000	£'000	£'000
At 1 January 2018	10,012	7,165	33	17,210
Additions	79	436	-	515
Assets write off				
At 31 December 2018	10,091	7,601	33	17,725
Depreciation				
At 1 January 2018	3,647	6,122	33	9,802
Charge for the year	438	327	-	765
At 31 December 2018	4,085	6,449	33	10,567
Net Book Value				
At 1 January 2018	6,366	1,043	-	7,408
At 31 December 2018	6,006	1,152	-	7,158

Heritage assets

The institution holds a collection of heritage assets relating to the history of the Institution itself and the wider history of mechanical engineering, which includes printed works, pictures, and other artefacts. All these items have been donated to the Institution and so information on their cost or valuation is not available and cannot be obtained at a cost commensurate with the benefit to the users of the accounts and the charity.

Institution	Land & Property	Furniture & Equipment	Total
Cost	£'000	£000	£'000
At 1 January 2018	9,836	5,045	14,881
Additions	51	302	353
At 31 December 2018	9,887	5,347	15,234
Depreciation			
At 1 January 2018	3,562	4,808	8,370
Charge for the year	355	195	550
At 31 December 2018	3,917	5,003	8,920
Net Book Value			
At 1 January 2018	6,274	237	6,511
At 31 December 2018	5,970	344	6,314

The Institution owns the freehold of One Birdcage Walk and its head office. The Trustees believe that its open market value is significantly in excess of this historical cost based on carrying value. Whilst part of the building is let out to third parties, the entire property is accounted for within tangible fixed assets at cost less depreciation as the fair value of the investment property component cannot be reliably measured without undue cost or effort.

13 Fixed Asset Investments

Group	2018			2017
	Cost	Market Value	Cost	Market Value
Analysis of Investments - UK	£000	£000	£000	£000
Fixed Interest Unit Trusts	171	607	826	1,498
Equities Unit Trusts	1,312	5,273	5,752	12,410
Charities Official Investment Fund Income Units	1,066	2,445	1,120	2,770
Cash	59	59	103	103
Stephenson LLP	1,650	1,650	1,400	1,400
Property – let on 999 year lease	9	9	9	9
	4,267	10,043	9,210	18,190
Analysis of Investments – outside the UK				
Fixed Interest Unit Trusts	-	-	583	573
Equities Unit Trusts	-	-	1,373	2,400
	-	-	1,956	2,973
Multi-asset Funds	8,003	7,915	1,068	1,333
	8,003	7,915	3,024	4,306
Total Investments	12,270	17,958	12,234	22,496

Movement of investments	2018	2017
	£000	£000
Market value at 1st January 2018	22,393	24,147
Acquisitions	7,363	481
Sales proceeds	(10,360)	(4,022)
Net investment gain/(loss)	(1,497)	1,787
Market value (excluding cash) at 31st December 2018	17,899	22,393
Cash awaiting investment	59	103
Total market value at 31st December 2018	17,958	22,496
Historic cost at 31st December 2018	(12,270)	(12,234)
Unrealised investment gain at 31st December 2018	5,688	10,262
Net investment gain/(loss)	(1,497)	1,787
Foreign exchange translation gain	-	1
Total gains/(losses) on investment assets	(1,497)	1,788
Interest and dividends	2018	2017
	£000	£000
Dividends receivable from unit trusts	606	651
Bank interest – general funds	-	1
	606	652

All the dividends and interest arises from the investments detailed above.

14 Debtors

	Group		Institution	
	2018	2017	2018	2017
	£000	£000	£000	£000
Trade debtors	3,442	2,189	479	509
Other debtors inc. VAT & other taxes	355	1,285	382	621
Prepayments and accrued income	692	1,030	622	369
Loans due from group companies	-	-	2,705	4,033
Amounts due from group companies	-	-	5,273	3,654
	4,489	4,504	9,461	9,186

Loans from group companies are charged interest at a rate of 2% above the National Westminster Bank base rate but the Institution has waived interest until the group company returns to positive distributable reserves.

15 Analysis of net funds

	Balance	Group	Balance
	1 Jan 2018	Cash flows	31 Dec 2018
	£'000	£'000	£'000
Cash awaiting investment	103	(44)	59
Cash at bank and in hand	2,373	409	2,782
At 31 December 2018	2,476	365	2,841

16 Creditors: Amounts falling

due in less than one year

	Group		Institution	
	2018	2017	2018	2017
	£000	£000	£000	£000
Trade creditors	896	2,324	824	1,579
Other creditors	1,681	1,334	1,536	1,080
Amounts due to group companies	-	-	995	1,161
Accruals	316	448	-	-
Taxation and social security	248	-	-	-
Deferred income	5,175	4,292	4,218	3,880
	8,316	8,398	7,573	7,700

Deferred income represents the value of membership subscriptions, property rents, and event income received in respect of the next calendar year.

Reconciliation of deferred income:

	Group		Institution	
	2018	2017	2018	2017
	£000	£000	£000	£000
Balance at 1 January	4,292	3,754	3,880	3,595
Amount released to income	(4,292)	(3,754)	(3,880)	(3,595)
Amount deferred in the year	5,175	4,292	4,218	3,880
Balance at 31 December	5,175	4,292	4,218	3,880

17 Analysis of Group Net Assets Between Funds

2018				
Fund balances at 31 December are represented by:	Unrestricted £000	Endowment £'000	Restricted £'000	Total £'000
Intangible fixed assets	2,113	-	-	2,113
Tangible fixed assets	7,158	-	-	7,158
Investments	6,068	9,013	2,877	17,958
Current assets	7,411	-	306	7,717
Current liabilities	(8,155)	-	(161)	(8,316)
Defined benefit pension scheme liability	(1,895)	-	-	(1,895)
At 31 December 2018	12,700	9,013	3,022	24,735

2017				
Fund balances at 31 December are represented by:	Unrestricted £'000	Endowment £'000	Restricted £'000	Total £000
Intangible fixed assets	2,117	-	-	2,117
Tangible fixed assets	7,408	-	-	7,408
Investments	7,895	11,635	2,966	22,496
Current assets	6,905	-	357	7,262
Current liabilities	(8,092)	-	(306)	(8,398)
Defined benefit pension scheme liability	-	-	-	-
At 31 December 2017	16,233	11,635	3,017	30,885

18 Capital and Income Funds – Analysis of Movements

	Balance at 1 Jan 2018	Incoming Resources	Resources Expended	Gains and (Losses)	Transfers	Balance at 31 Dec 2018
	£'000	£'000	£'000	£'000	£'000	£'000
Unrestricted Funds						
Institution, Reserve Fund & PEP Ltd	16,233	23,506	(26,119)	(2,109)	1,189	12,700
Restricted Funds						
Whitworth Scholarship Fund	2,263	198	(156)	-	-	2,305
General Trust	-	142	(356)	-	214	-
James Clayton Trust	143	55	(65)	-	-	133
Trust for Education & Research	376	67	(107)	-	-	336
Sundry Small Trusts	235	20	(6)	-	-	249
	3,017	481	(690)	-	214	3,022
Endowment Funds						
Whitworth Scholarship Fund	4,479	-	-	(754)	-	3,725
General Trust	3,981	-	-	(279)	(1,403)	2,299
James Clayton Trust	1,479	-	-	(115)	-	1,364
Trust for Education & Research	1,317	-	-	(55)	-	1,262
Sundry Small Trusts	379	-	-	(16)	-	363
	11,635	-	-	(1,219)	(1,403)	9,013
Total Funds	30,885	23,987	(26,809)	(3,328)	-	24,735

The restricted and endowment funds mainly comprise a number of trusts established by deed, holding resources set aside to provide prizes and awards to recognise achievement and generally foster progress in mechanical engineering. The restricted funds represent the income and expenditure of each trust and the endowment funds the capital held to generate investment income. The Trustee Board acts as sole corporate trustee. The majority of the funds held originate from legacies and lifetime gifts donated to commemorate the achievements of prominent engineers. The General Trust and Trust for Education & Research were established with the agreement of the Charity Commissioners to aggregate the resources of a large number of smaller trusts with similar aims. The James Clayton Trust and some smaller trusts (for reasons of convenience totalled in the sundry category above) have more specific objectives and could not be included in the two main trusts. The Whitworth Scholarships Fund was originally established in 1868, with the trusteeship being transferred from the UK Government in December 2001.

The transfer from the unrestricted funds to the General Trust reflects the Institution deciding to expend more resources in this area than could be supported from the income from the General Trust endowment fund and effectively funding the balance from unrestricted funds and using some endowment funds for unrestricted purposes as permitted by the Trust deeds.

Capital and Income Funds - Analysis

	Balance at 1 Jan 2017	Incoming Resources	Resources Expended	Gains and (Losses)	Transfers	Balance at 31 Dec 2017
	£'000	£'000	£'000	£'000	£'000	£'000
Unrestricted Funds						
Institution, Reserve Fund & PEP Ltd	15,569	21,585	(23,695)	3,018	(334)	16,233
Restricted Funds						
Whitworth Scholarship Fund	2,194	176	(107)	-	-	2,263
General Trust	(82)	147	(399)	-	334	-
James Clayton Trust	165	54	(76)	-	-	143
Trust for Education & Research	475	68	(167)	-	-	376
Sundry Small Trusts	218	19	(2)	-	-	235
	2,970	464	(751)	-	334	3,017
Endowment Funds						
Whitworth Scholarship Fund	3,876	-	-	603	-	4,479
General Trust	4,063	-	-	(82)	-	3,981
James Clayton Trust	1,404	-	-	75	-	1,479
Trust for Education & Research	1,154	-	-	163	-	1,317
Sundry Small Trusts	333	-	-	46	-	379
	10,830	-	-	805	-	11,635
Total Funds	29,459	22,049	(24,446)	3,823	-	30,885

19 Trust & Prize Fund Individual

Accounts

GENERAL TRUST
Benefactors Comprise

James Bates	Thomas Bernard Hall
Horace Bedford	Herbert Edward Hancocke
Charles Sharpe Beecher	Francis Hewlett
William Bennett	Lord Hinton of Bankside
Joseph Bramah	Shirley Nelson Howe
T H Carr	Robert Herbert Innes
Thomas Andrew Common	Kenneth Harris James
Gresham Cooke	Anne Labrow
Winifred Smart Crabtree	Olive Mary Main
George Curry	Ernest William Moss

Bernard Incledon Day	The Reactionaries
Bryan Donkin	Charles Howard Readman
H V Disney	William Sweet Smith
A H Duncan	A M Strickland
Christian Peter Dunkel	Clifford S Steadman
John Edward Elliott	Thomas Stephen
James Moir Forbes	Thatcher Bros.
Sir Hugh Ford	Fredrick Barnes Waldron
Winifred Foreman	Edwin Walker
Andrew Fraser	Neil Watson
Thomas Lowe Gray	Viscount Weir
Donald Julius Groen	Frau May Borner Wylie

TRUST FOR EDUCATION AND RESEARCH
Benefactors and Predecessor Trusts Comprise

John F Alcock Memorial Prize	Frank Radcliffe
Carl Louis Breedon	Alfred Rosling Bennett Premium
Henry Stacey Cattermole	Clarence Noel Goodall
Engineering Applied to Agriculture	Charles S Lake
Filtration	Rover Midlander
M M Flatman	T A Stewart Dyer
Thomas Hawksley	Fredrick Harvey Trevithick
Hele-Shaw National Certificate	Sir Seymour Briscoe Tritton
Mrs P M Lowery	Stanley Herbert Whitelegg
Manville Bequest Scholarship	Safety Award in Mech. Engineering
E May	Starley Premium
Ludwig Mond	George Stephenson Research
F G Moore	Herbert Ackroyd Stuart
Arthur Morley Higher National Diploma	The Students Aid
John Player Lectureship	Water Arbitration
Raymond Coleman Prescott Scholarship	Willans Premium
William Alexander Agnew Meritorious	L Marson
Alastair Graham-Bryce	Margaret Winifred Astridge

The above trust funds are under the trusteeship of the Institution of Mechanical Engineers. Because of the limited space available, the information presented is, of necessity, brief. If you would like more details, please contact the Secretary to the Trustee Board Awards Committee.

Scholarships Fund was originally established in 1868, with the trusteeship being transferred from the UK Government in December 2001.

The transfer from the unrestricted funds to the General Trust reflects the Institution deciding to expend more resources in this area than could be supported from the income from the General Trust endowment fund and effectively funding the balance from unrestricted funds.

The Reserve Fund is the name used to describe the funds set aside by the Trustee Board out of surpluses generated in previous years. Its purpose is to provide investment income for day to day activities, capital for future major projects, as well as providing a contingency fund in the event of an interruption to normal flows of income.

The powers under which these monies are invested are set down in the By-laws of the Institution. From 13 February 2002 revised By-Laws came into effect which incorporates a “general investment power” in-line with the Trustee Act 2000. In addition, the By-laws grant the power to appoint an investment manager and to delegate to this post discretionary power in relation to the management of the Institution's investments. There is also a power to appoint a corporate body as the Institution's nominee to hold the investments.

All the Reserve Fund investments are managed by Schroder & Co. Limited, with their nominee company being used to hold investments.

Whitworth Scholarships Fund

On 11 December 2001, the trusteeship of the Whitworth Scholarships Fund was transferred from the Secretary of State for Education and Skills to the Institution. The Whitworth Scholarships Fund was established in 1868 under a deed of covenant and trust between Sir Joseph Whitworth, a leading manufacturer of machine tools and famous mechanical engineer, and the then President of the Committee of Council on Education. The objective of the Trust Fund is to bring science and industry together through the awarding of scholarships for the study of mechanical and related sciences.

The Trust consists of two funds: the Endowment Fund representing permanent capital and the Restricted Fund representing the accumulation of unspent income.

Investments in both funds consist of common investments funds managed by Merrill Lynch Investment Managers Limited – Charishare invests in equities and Charinco invests in gilts and fixed interest stocks.

General Trust

The General Trust was created by the Institution on 25 April 1979 by trust deed as part of an exercise to consolidate a number of existing small trust funds. The purposes of the General Trust have been widely drawn to allow the Trustee Board flexibility in using the trust's resources.

The Trust Deed provides unrestricted investment powers, including the ability to appoint investment managers and to allow nominees to hold investments.

Schroder & Co. Limited manages the majority of the investments, with a small part being held in the form of Charities Official Investment Fund income units. The nominee company of Schroder’s is used to hold the investments that they manage.

James Clayton Trust Fund

The James Clayton Trust Fund was established shortly after the Second World War under the will of the late James Clayton. The objects of the trust are to provide various prizes and awards in the field of mechanical engineering.

The will does not specify investment powers, hence the Trustee Act 2000 is the governing document for these purposes. On 6 August 1996, the Charity Commission issued an order under Section 26 of the Charities Act 1993 formally granting the power to appoint an investment manager and to delegate to this post discretionary powers in relation to the management of the Trust’s investments. The order provides the power to appoint a corporate body as the Trust’s nominee to hold the investments.

All the James Clayton Fund Investments are managed by Schroder & Co. Limited with their nominee company being used to hold investments.

Trust for Education and Research

The Trust for Education and Research was created on 18 January 1982 under a scheme organised with the aid of the Charity Commission whose purpose was to consolidate twenty-six small trust funds. The objects of the trust are to provide various prizes and awards in the field of mechanical engineering education and research.

The Trust Deed does not grant specific investment powers and since its formation all investments have been held in the form of Charities Official Investment Fund income units.

Bruce Ball National Certificate

Prize Fund

This Trust was established in 1965 to provide a prize in remembrance of Bruce Ball. The conditions attached were too specific for the Trust to be included in a consolidation.

The Trust Deed provides no investment powers beyond those granted by Trust Law and all capital is invested in Charities Official Investment Fund income units.

Paul Henderson Memorial Trust Fund

This Trust was established on 5 March 1968 to provide a prize in memory of Paul Henderson, with conditions specific enough to preventing its inclusion in a consolidation.

The Trust Deed provides unrestricted investment powers. However, in view of the relatively small value of the Trust, all capital is held in Charities Official Investment Fund income units.

C C Pounder National Certificate Prize Fund

This Trust was established on 31 August 1965. The same comments as provided for the Bruce Ball Fund are applicable.

Tribology Award Fund

This Trust was established on 2 April 1969 to award annually a gold medal for outstanding achievement in the field of tribology.

The Trust Deed provides unrestricted investment powers. However, due to the relatively small value of the fund, all capital is invested in Charities Official Investment Fund income units.

James Watt International Medal Fund

This Trust was established on 31 August 1965. Its purpose is to award biennially a gold medal for outstanding achievement in the advancement of the science of mechanical engineering. However, in recent years the income generated has proved insufficient to pay for medals and the General Trust has purchased medals to allow awards to be made.

The Trust Deed provides investment powers identical to those available in the Institution By-Laws. However, because of the very small value of the fund, all capital is invested in Charities Official Investment Fund income units.

Spencer Wilks Trust

This Trust was established on 18 July 1973 to provide awards in the name of Spencer Wilks to promote, advance, assist, or encourage the study of and technical education in, the engineering aspects of transportation.

The Trust Deed provides unrestricted investment powers. However, because of the relatively small value of the fund, all capital is invested in Charities Official Investment Fund income units.

Research and Development

Trust Fund

This Trust was established on 22 November 1995 to promote and support research and development in the field of mechanical engineering.

The Trust Deed provides unrestricted investment powers. However, as the trust currently does not hold any funds as capital, all income monies are placed on bank deposit.

20 Related Party Transactions

The Institution of Mechanical Engineers, the parent charity, has five 100% owned subsidiaries which carry on non-charitable trading activities. All transactions between the Charity and its subsidiaries have a trading nature i.e. providing training, executing payroll, carrying out HR functions etc.

At the year end the Institution of Mechanical Engineers had the following outstanding balances with its subsidiary companies :

	2018	2017
Amounts due from Professional Engineering Projects Ltd	2,361,688	4,461,182
Amounts due from IMechE Services Limited	78,948	87,866
Amounts due from Sonaspection International Limited	2,236,769	1,976,650
Amounts due to Siantonas Ball Limited	222,692	222,692
Amounts due to Engineering Training Solutions Limited	730,773	730,773

All amounts are considered to be repayable on demand.

	2018	2017
Transactions with Professional Engineering Projects Ltd	665,441	158,319
Transactions with IMechE Services Limited	3,073	1,204
Transactions with Sonaspection International Limited	910,119	689,479

21 Reconciliation of net income to net

cash flow from operating activities

	2018 £'000	2017 £'000
Net (expenditure)/income for the reporting period (as per the statement of financial activities)	(4,319)	(26)
Amounts written off	952	(583)
Adjustments for:		
Amortisation	102	297
Depreciation	765	864
Dividends, interest and rent from investments	(606)	(652)
(Increase)/decrease in debtors	15	(567)
Increase/(decrease) in creditors	(82)	1,697
(Increase)/decrease in stocks	(61)	(50)
(Gain)/loss on investments	1,497	(1,788)
Net cash provided by operating activities before pension scheme	(1,737)	(808)
Increase in defined benefit pension scheme costs	64	56
Net cash provided/ (consumed) by operating activities	(1,673)	(752)

22 Financial instruments

	Group		Institution	
	2018	2017	2018	2017
	£000	£000	£000	£000
Financial assets measured at amortised cost	7,271	6,344	5,164	6,306
Financial liabilities measured at amortised cost	(2,893)	(4,108)	(3,355)	(3,820)
Financial assets measured at fair value	17,958	22,496	12,079	15,864

23 Amounts written off in respect
of Amber Train Limited

The Company’s subsidiaries undertaking, Amber Train Limited, was placed into liquidation on 24 July 2017. Losses in relation to this of £583k were recognised in the 2017 financial statements.

	2018	2017
	£'000	£'000
Write off of Intercompany balances and associated costs	-	583

24 Consolidated Statement of Financial Activities 2017

					2017
	Notes	Unrestricted Funds	Restricted Funds	Endowment Funds	Total
		£'000	£'000	£'000	£'000
Income and Endowments from:					
Donations and Legacies					
		10	-	-	10
Charitable activities					
Membership subscriptions		11,319	-	-	11,319
Technical		2,005	-	-	2,005
Professional development & Membership		153	-	-	153
Information & Library services		5	-	-	5
Marketing & Regional		-	-	-	-
Other trading activities					
Venue hire, Training, Learning & Development		7,261	-	-	7,261
Publishing Royalties		5	-	-	5
Investments					
Interest & Dividends	13	188	464	-	652
Other					
Rents Receivable		639	-	-	639
Total		21,585	464	-	22,049
Expenditure on:					
Raising funds					
Non-charitable trading activities		8,526	-	-	8,526
Investment management costs		3	-	-	3
Charitable activities					
Technical		6,362	-	-	6,362
Marketing		2,014	-	-	2,014
Regional activities		2,258	-	-	2,258
Professional development & Membership		1,022	-	-	1,022
Information & Library Services		1,222	-	-	1,222
Membership subscriptions		1,028	-	-	1,028
Public facilities - Birdcage Walk		478	-	-	478
Prizes, Awards and Scholarships		-	751	-	751
Total	3	22,910	751	-	23,661
Net expenditure before gains/(losses) on investment assets		(1,325)	(287)	-	(1,612)
Net gains /(losses) on investment assets	13	983	-	805	1,788
Net income/(expenditure) before amortisation of goodwill		(342)	(287)	805	176
Amortisation of goodwill		(202)	-	-	(202)
Net income/ (expenditure)		(544)	(287)	805	(26)
Transfers between funds	18	(334)	334	-	-
Amounts written off in respect of Amber Train Limited	23	(583)	-	-	(583)
Actuarial (losses)/gains on defined benefit pension scheme	10	2,035	-	-	2,035
Net movement in funds		574	47	805	1,426
Reconciliation of funds					
Total funds brought forward		15,659	2,970	10,830	29,459
Total funds carried forward	17	16,233	3,017	11,635	30,885

Legal and administrative details

Name

The Institution of Mechanical Engineers

Address of principal office

1 Birdcage Walk, Westminster, London, SW1H 9JJ

Charity registration numbers

The charity registration number of the Institution and subsidiary prize and award funds is 206882. The number for the Whitworth Scholarships Fund is 313756.

Governing document and constitution

The Institution was founded in 1847 and was incorporated by Royal Charter in 1930. Copies of the Royal Charter and By-Laws are available from the Trustee Department at the London address.

Trustees

The Trustee Board comprises the President, President-Elect, four Vice-Presidents, an International Vice-President and five or more ordinary members. All trustees are elected by the Corporate and Associate Membership of the Institution. Trustees are required to retire after a maximum of 3 years in post.

Trustee Board met 7 times during 2018 (2017: 7).

The names of those who served as trustees during the year and at the date of approval of this document are as follows:

	Number of meetings attended	Number of meetings in session
G Baker (resigned 29 June 2018)	3	3
S B M Beck	5	7
H A Clarke	6	7
P A Finlay (resigned 30 July 2018)	4	4
P Flinn (appointed 26 September 2018)	1	1
C J Griffiths (retired 23 May 2018)	2	2
G S Hartill (elected 23 May 2018)	5	5
Dr C Hickman (retired 23 May, appointed 20 June 2018)	5	6
R Hodgkinson (appointed 5 December 2018)	1	1
I R Joesbury (resigned 19 February 2019)	7	7
Professor A Lau (resigned 21 February 2019)	4	7
J H Lowe (retired 23 May 2018)	2	2
Dr. H Meese (elected 23 May 2018)	5	5
P J Peel	7	7
H C Rivers	7	7
A Roche (appointed 1 August 2018)	3	3
R P Smith (resigned 20 July 2018)	4	4
S M Suleyman	6	7
A Taggart (appointed 26 September 2018)	1	1

‘Elected’ and ‘retired’ related to the normal transition of trustees at the beginning and end of their periods of elected office. ‘Appointed’ and ‘resigned’ relate to other changes outside this normal process.

Chief Executive

The Chief Executives during the period were:
Stephen Tetlow MBE. (resigned 13 July 2018)
Colin Brown (appointed 16 July 2018)

Key Management Personnel

This includes the Chief Executive and four directors: Finance and Commercial Director, HR Director, Membership Operations Director and Chief Marketing Officer (until his departure in Nov 2018).

Names and addresses of bankers and

professional advisers

Auditor:	Crowe U.K LLP St. Bride's House 10 Salisbury Square London, EC4Y 8EH
Bankers:	National Westminster Bank plc P O Box 113 Cavell House 2a Charing Cross Road London, WC2H 0PD CAF BANK Ltd PO Box 289 Kings Hill West Malling Kent ME19 4TA
Investment managers:	Schroder & Co Limited 12 Moorgate London, EC2R 6DA Blackrock Investment Managers Limited 33 King William Street London EC4R 9AS CCLA Investment Management Limited 80 Cheapside London, EC2V 6DZ
Solicitors:	Bristows 100 Victoria Embankment London, EC4Y 0DH
Pension advisers:	Barnet Waddingham LLP Decimal Place Chiltern Avenue Amersham HP6 5FG

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