

Welcome



Martin Powell
Chief Executive

The Institution of Structural Engineers' primary purpose is leading the development of structural engineering worldwide to secure a safe and resilient built environment for all.

We achieve this by supporting the continuing development of the profession, holding it to the highest standards. We play a significant, global role in structural engineering, sharing knowledge through our extensive networks. By working closely with our members and the profession, we champion the important contribution structural engineers make to society: our members' work is vital to public safety and meeting the challenges of the future.

Highlights for 2018 included the **Future of our profession**, a report summarising outcomes from February 2018's Council, which considered challenges for the industry over the next 10-15 years. We identified priorities and explored how the Institution can best support the profession into the future. We've used the findings to create several shared initiatives that ensure we continue to lead developments within the sector.

We were proud to launch **CROSS-AUS**, our Australasian reporting scheme established to capture and share lessons learned from structural safety issues, which might not otherwise get public recognition.

We aspire to create and promote sustainable solutions that can be used in the built environment to safeguard our future. Our **Structural Awards** is the foremost celebration of structural engineering. It showcases the world's most cutting-edge engineering projects where sustainable and responsible solutions are intrinsically embedded within the design. 2018's winner, the Tamina Canyon Crossing in Switzerland, is the highest arch bridge ever built in Europe and a remarkably economic structure which fits sensitively and harmoniously into its surroundings. The Tamina gorge and valley are home to several protected sites, habitats and species so construction activity above the gorge had to be kept to an absolute minimum, whilst encroachment on the gorge walls was restricted to the four foundations.



Our members' work
is vital to public safety.

Contents

3

About us

4

Worldwide membership

6

Competence and excellence

7

Convenient, flexible learning choices

8

Collaboration with other organisations

9

Responsive

10

Financial highlights 2018

12

Looking to the future

Image—

The Dubai Frame, UAE.
Winner of the 2018 Structural Award for Tall or Slender Structures

About us

The Institution is the world's largest international membership organisation dedicated to structural engineering. We are a charity established by Royal Charter, accountable to our Board of Trustees and advised by an elected Council. We are proud of our heritage and continue to be inspired by the opportunities to support structural engineers across the world for future generations.

Professional membership is one of the leading global benchmarks of competence and technical excellence. Members undergo rigorous technical assessment. We help them achieve this by supporting career-long development and learning.

We recognise both the breadth and depth of the needs of our members. We help engineers come together and share knowledge and ideas in a variety of ways, including face-to-face events, digital platforms and social media.

We provide a voice for our members, promoting their contribution to society as innovative, creative problem solvers and the guardians of public safety.

We are inclusive. No one with the aspirations and ability for a career in structural engineering should encounter any barriers. We are constantly reviewing our routes to membership to provide flexibility in the application and examinations process, offering more choice for all our candidates.

Our principles—

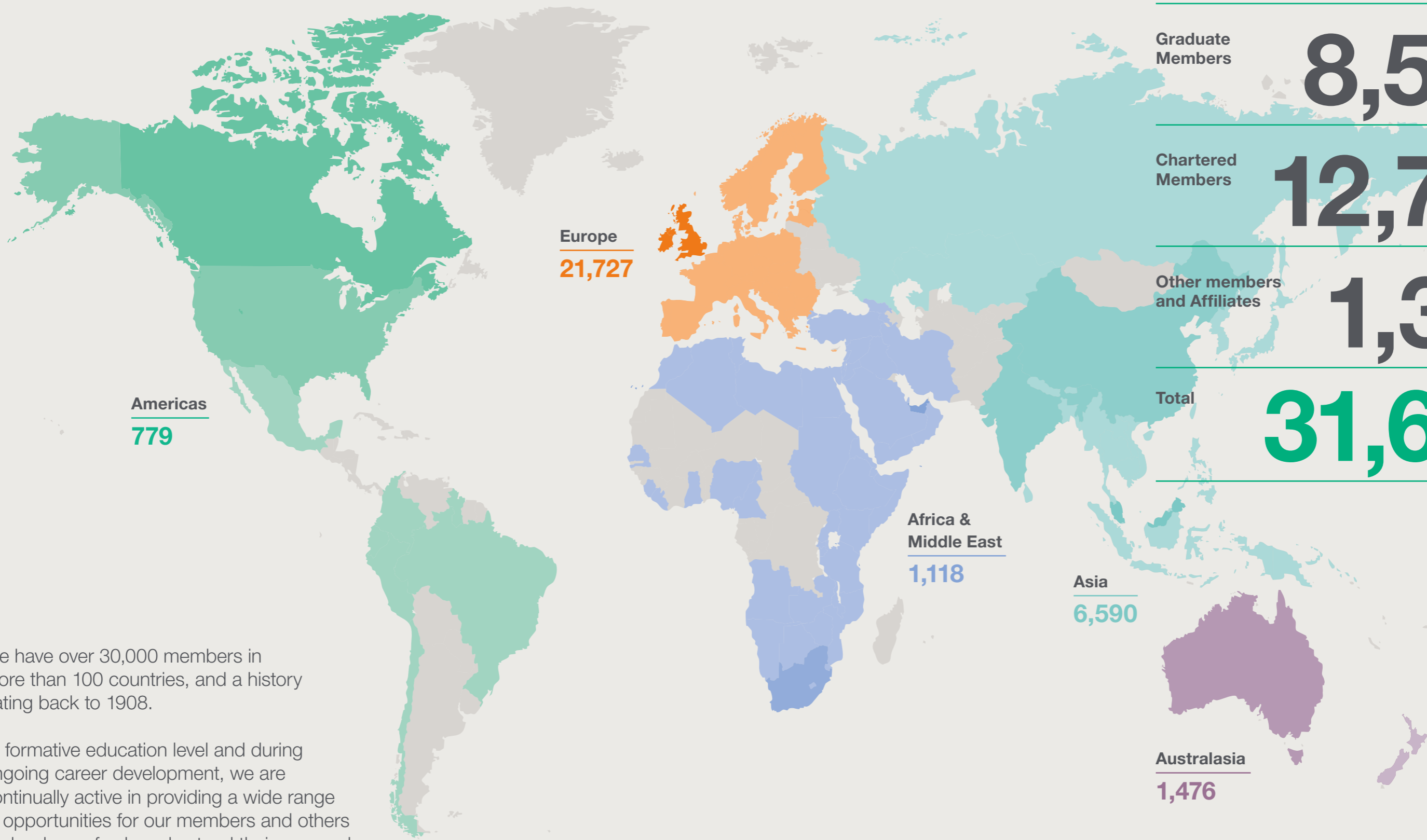
- We are committed to exemplary **professional standards**
- We **respect** our members
- We **champion** the profession
- We are passionate about a **sustainable** built environment for all
- We are **inclusive**
- We **recognise** and **celebrate** the most talented structural engineers
- We are **collaborative**
- We are truly **international**



Image—

Young Researchers' Conference 2018, Institution HQ

Worldwide membership



Student Members **9,106**

Graduate Members **8,500**

Chartered Members **12,771**

Other members and Affiliates **1,313**

Total **31,690**

Data at Dec 2018

We have over 30,000 members in more than 100 countries, and a history dating back to 1908.

At formative education level and during ongoing career development, we are continually active in providing a wide range of opportunities for our members and others to develop, refresh and extend their personal competencies and professional excellence.

Countries where the Institution has most members are represented on this map in the darkest shades.

Competence and excellence

Driving professional competence is at the core of everything we do. We offer a wide range of opportunities for our members to develop, refresh and extend technical and personal competencies.

We also help members specialise by developing courses, resources and qualifications in areas such as fire, seismic and offshore engineering.

We nurture talent and skills from school through to retirement. We provide tailored guidance for students aged 16+, promoting the benefits of a career in structural engineering. Our experienced members mentor those just starting out or taking the next step in their career.

We lead in best practice industry standards. We collaborate with other industry experts to share knowledge, and with national and international professional organisations to benefit from other experience. We ensure our examinations are aligned with industry and world standards, recognising international expertise while ensuring quality is not compromised.

Our strong regional representation provides support to engineers wherever they are in the world.

Convenient, flexible learning choices

Structural engineering is constantly evolving, and keeping abreast of technical and professional developments is an essential part of the role.

We offer resources to benefit members and non-members. These are useful to both practising structural engineers, and broader audiences such as teachers looking to inspire future generations, non-structural engineers undertaking research, or those new to the industry.

Courses

Through partnerships with leading experts, academic institutions, trade and professional organisations, our CPD courses offer an expanding range of technical, professional and management topics to support practitioners at every stage of their career.

Lectures

Members have access to a broad programme of events, including research, practice, education, and technical lectures. Regional Group activity is tailored for local audiences and their needs. We support events run by affiliates, providing insight from across the built environment. Many of our events are livestreamed and recorded so they can be watched at any time, from anywhere in the world.

Library

The Institution's Library houses one of the UK's finest specialist collections of printed structural engineering literature. Books, standards and technical reports can be read on-site or loaned via post.

E-library

Our E-library is an expanding online resource.

Publications

We produce a range of quality publications, including the latest news, technical articles, features, opinion and research.

• *The Structural Engineer*

Our flagship publication features peer-reviewed technical and professional guidance and case studies from a fascinating range of structural engineering projects.

• *Structures*

A peer-reviewed journal showcasing cutting edge research.

• *Manuals and guides* on a wide range of topics, from fire safety engineering to temporary demountable structures.

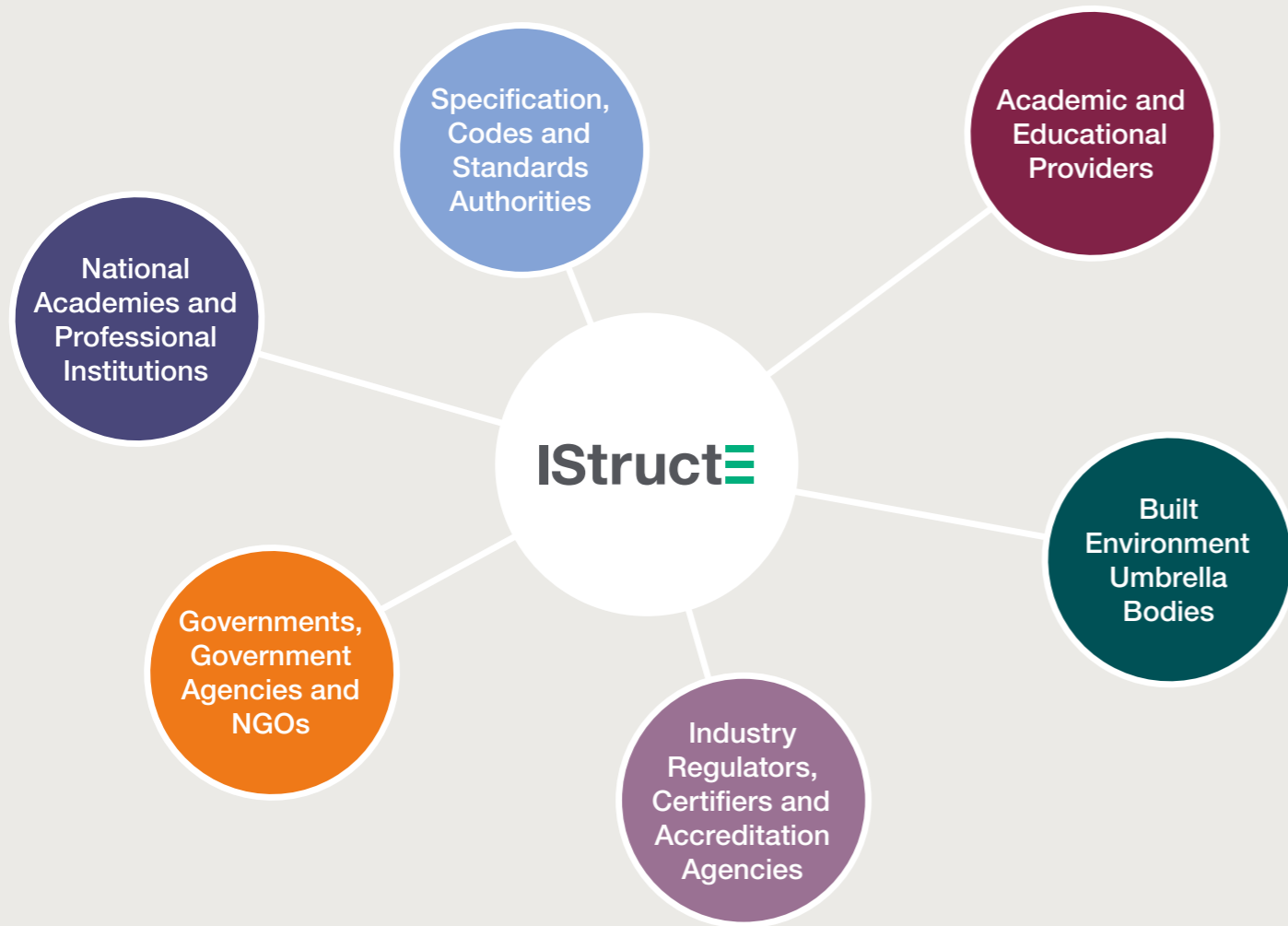
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Certificate presentation ceremony 2018, Institution HQ



Collaboration with other organisations

Using our expert guidance and knowledge, we work in partnership with many national and international organisations to support the development of a safe, sustainable and resilient built environment for all. Our members sit on a wide range of national and international external specialist advisory panels and bodies.



Structural-Safety

Structural-Safety works with the industry to improve safety in the design, construction and use of structures. It has two entities SCOSS (Standing Committee on Structural Safety) and CROSS (Confidential Reporting on Structural Safety),

and is a collaboration between the Institution of Structural Engineers, the Institution of Civil Engineers and the Health and Safety Executive. It is also supported by several UK national authorities, including the Ministry of Housing, Communities & Local

Government, Highways England, Network Rail, Scottish Government Building Standards Division and Local Authority Building Control. CROSS has been operating since 2005 with demonstrable public safety outcomes.

Responsive

We're committed to evolving and responding to the changing needs of our members and public responsibility. In 2018, we improved our working practices and membership offer to ensure we have the tools, flexibility and robustness to meet the future challenges of the industry.

Supporting early career engineers
We want to make it easier for early career engineers to stand out from the crowd and improve their employability. In 2018, we launched the Certificate in Structural Behaviour, which assesses an engineer's understanding of fundamental structural theory. The certificate is an internationally recognised mark of competence sought by modern employers. It also helps engineers become professionally qualified.

Building safer futures

Emergency situations in 2018 included a pedestrian bridge collapse at the University of Florida, the collapse of Italy's Morandi Bridge, and the evacuation of the Opal Tower in Sydney Olympic Park. Such events provide a platform to scrutinise weaknesses, with a view to preventing similar incidences occurring in the future. Our members are frequently called upon to advise and lead on response committees.

We have expert members advising on seven of the specialist working groups established to review and consider safety in the built environment following the publication of Dame Judith Hackitt's report "Independent Review of Building Regulations and Fire Safety", as a result of the Grenfell Tower fire in 2017.

Affiliate Scheme

To develop closer ties with the international engineering profession, we offer affiliation to those with an interest in structural engineering. Benefits include discounts on our publications and courses, access to the E-library, and invitation to networking events, lectures and livestreams.

Certificate in Structural Behaviour

Take a step closer to becoming professionally qualified

A 2 hour online exam will assess your understanding of structural behaviour and prove to employers you have the skill set they're looking for.

Find out more
istructe.org/sbcertificate

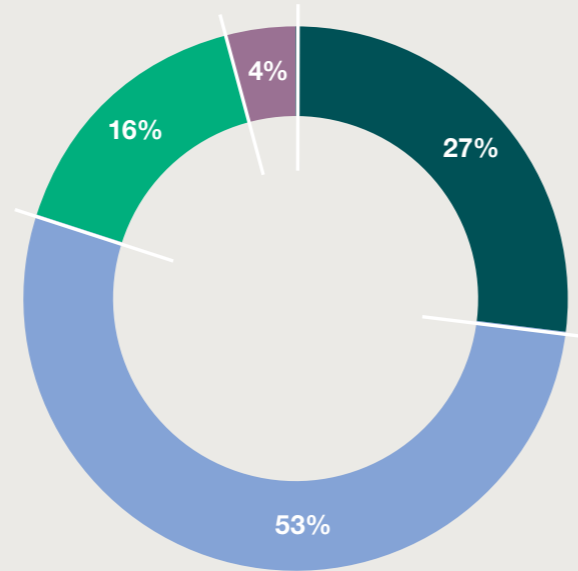
Financial highlights 2018¹

Income 2018

Most of our income comes from membership subscriptions and trading subsidiaries. In 2018, these sources accounted for 80% of total revenue.

Key—

- Trading companies
- Membership subscriptions
- Learning, development and examinations
- Other activities and donations



Image—
Young Engineers Conference 2018, Coventry



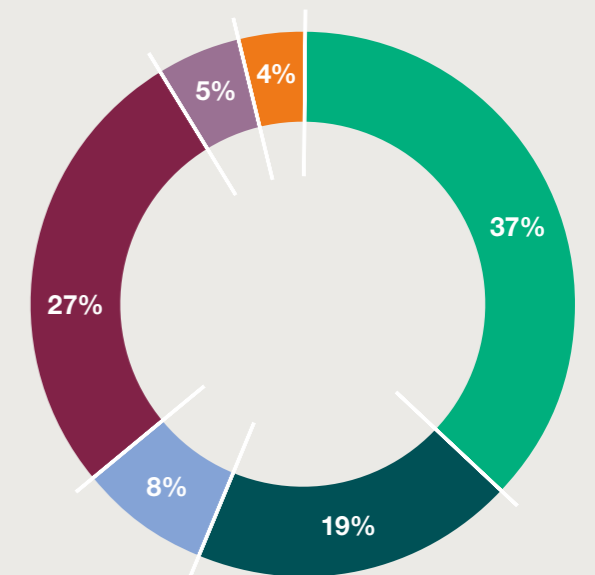
Image—
People & Papers Awards Ceremony 2018, London

Expenditure 2018

The provision of membership, learning, development and examinations was the largest area of expenditure in 2018, accounting for 37% of total spend.

Key—

- Learning, development and examinations
- Trading companies
- Digital transformation and IT
- Other staff and employment costs
- Other operating costs
- Depreciation



¹ Data is drawn from our final 2018 management accounts. The full audited and adopted accounts of the Institution can be accessed via our website.

Looking to the future

We live in a fast-paced, ever changing world with a host of new challenges on the horizon. We have a duty to evolve and keep pace with this change, so we can continue to serve our members and provide public safety to the best of our ability. Good business and the best solutions demand holistic thinking and input that draws from a wide variety of views, perspectives and experiences. We will continue to listen to our members' needs and find innovative and reliable ways to support them and society. Artificial intelligence, big cities and resilience are topics that impact the future of structural engineering, and these formed the basis of the Future of our profession report.

You can read it at www.istructe.org/future-profession.

Global interoperability

We are witnessing the construction of ever more complex structures, built to serve multiple functions, many of which require collaboration by various stakeholders working together with different backgrounds in international training. The need to achieve global interoperability is becoming increasingly important to streamline and benchmark standards and simplify cross-collaboration, which in turn reduces costs and increases safety.

To this end, we have joined forces with the Structural Engineering Institute, USA, to host a conference in September 2019, where we will review the successes and challenges of building nine global iconic structures. We are bringing together structural engineers alongside other construction industry experts, to share experiences of what worked well and what could be done differently to improve working practices and efficiency in the future.

Find out more at www.istructe.org/joint-conference.

Improving communication

The way the world communicates is changing. There are fewer face-to-face meetings and fewer telephone calls. Instead, there's greater emphasis on digital communications, so efficient digital connectivity is essential.

Over the past five years, our international membership has expanded by 13%. In 2009, our Board comprised 6% international members, and in 2019 it is 46%. As we look to serve more members around the world, we need to adapt our communication methods so that our resources are readily available in international markets, as well as ensuring we provide information in a useful way for members in the UK.

To support this, we will be launching our new website in May 2019 – it's still at www.istructe.org.

IStructE

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