



Institution of Railway Signal Engineers

# Annual Report

Number 112

1 January to 31 December 2024

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This Annual Report briefly describes the activities undertaken by the Institution of Railway Signal Engineers (IRSE) throughout the world during 2024. Our president from April 2024 has been Jane Power FIRSE from the UK.

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For up to date information about the Institution or its activities, or to download a membership application form, visit the IRSE website [www.irse.org](http://www.irse.org).

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## An introduction from our President

As the 100th president, my presidential theme is 'Power to the people'. Even though technology is getting smarter and we are introducing more automation, engineers are still crucial. We need smart engineers to understand the capabilities and constraints of the new technology in order to maximise its potential. Just as importantly, we need to understand where technology can't be trusted and how we can still achieve the levels of safety and security needed.

One of the first things I organised was an in-person seminar on Artificial Intelligence (AI) in Railways – as news of the technology seems to pervade all industries it felt appropriate to explore whether it was a real proposition for railways. We had professors from universities and representatives from software development companies as well as railway professionals presenting on the topic. Many of the talks addressed the issues of safety and assurance of machine learning or AI generated systems as well as real-world applications. It was a very interesting and informative day. Sales of the recording went live in the latter half of the year ([irse.info/aivideo](http://irse.info/aivideo)).

Engineers who know 'why' we do things and not just 'how' are more important than ever, so that lessons from the past are not forgotten. With more automation there could be a tendency to use processes without fully understanding them, so we must work hard to retain this vital knowledge in the industry. The title for my presidential lecture series is 'Unsung heroes' and there were seven lectures delivered in 2024 (see page 14). In addition, as part of the series, we released a video of a test weekend on the London Underground 4 Lines Modernisation programme – by Lee Tarr. These have highlighted where people are carrying out vital roles in the industry that perhaps we don't usually celebrate. They are all on the IRSE vimeo channel at [irse.info/unsungheroes](http://irse.info/unsungheroes)

In August 2024 the IRSE Convention, held in Toronto, was a great success. There is a full report on page 16. It was a week-long event where many members enjoyed a seminar day and technical visits focusing on railways and projects in Canada and North America. The seminar day is now available free to watch online on the IRSE's vimeo channel at [irse.info/torontovideo](http://irse.info/torontovideo)

In the vote at the AGM on 25 April, the results were overwhelmingly in favour of applying for the IRSE to have a Royal Charter. Building on our continuing commitment to excellence, Royal Charters are reserved for bodies which



work in the public interest and are able to demonstrate pre-eminence, stability and permanence in their particular field. Achieving such status further recognises and endorses the talent and expertise of our membership. It is not a fast process but progress is being made towards the formal application.

Last year saw the 35th anniversary of the Clapham Junction railway accident in London, UK. It was one of the worst accidents in the UK's railway history and it was the catalyst for the introduction of the IRSE Licensing scheme. The Licensing scheme has now been running for 30 years. It is a highly respected scheme that has served the industry well. I am leading the team to review the scheme, we have created a survey that we are aiming to share with as many people as possible, including all licence holders, to get honest feedback on the scheme.

In 2024 the Council approved the formation of the technical department – this is headed by Judith Ward and is dedicated to engaging directly with industry, government departments, academic institutions and stakeholders around the world. The pilot event is planned to be a symposium in the UK on the perceived rise of failures. Planning is underway for the IRSE to reach out to partner organisations.

The third annual IRSE Strategy Day was held in Toronto and while we caught up with the task and finish groups set up in 2023, we also debated the IRSE strategy going forwards. Plans are in place to crystallise the output from the day into a new strategy leading us to 2030. More information can be found on page 5.

The Equality, Diversity and Inclusion group continues its work to develop policy for the IRSE, refer to page 7.

In memory of past president Eddie Goddard, we launched the Younger Members' Systems Engineering short papers competition, and the first winner will be announced at the AGM in 2025.

Steve Boshier's presidency spanned the first quarter of 2024. He completed his programme of visits to IRSE sections and businesses within New Zealand, Australia and the UK. His presidential theme of 'Global Integration: people, process and technology' resonated with members, companies and organisations around the world, and has ensured that we are better connected.

Whilst in New Zealand, Steve met with CRLL, Kiwi Rail, Auckland Transport, Siemens Mobility, JMDR, WSP, Aurecon, and Arup to promote the benefits of the IRSE whilst developing a broader networking support. In Wellington, meetings were held with IRSE younger members to promote training and education within the profession and to gain the support of their companies.

In March, Steve attended the Australasian Section AGM and Technical Meetings in Brisbane where he presented on his presidential theme and progress that had been made during his time as president. He also presented several awards to members present at the meetings.

With the training, education, and technology being key pillars supporting Global Integration, meetings were also held in Newcastle, Australia with Competency Australia to view their training facility. A visit was made to Siemens Mobility in Chippenham, UK, to view technology developments and to discuss IRSE Licensing and support of the industry required. To round off his year, Steve met with the global office team in London to thank them for their ongoing support.

Finally, throughout the year I have been engaging with as many local sections as possible, to keep in touch with the worldwide membership. I would like to thank the sections for making me so welcome. It is great to see that so many of the sections are thriving and organising interesting and informative presentations and site visits. These really are the beating heart of the IRSE.

Jane Power, president 2024–2025.

# Charitable objects of the Institution

The Institution's charitable objects are recorded in its Articles of Association. They can be traced back to the formation of the Institution in 1912 and are:

- a) The advancement for the public benefit of the science and practice of signalling by the promotion of research, the collection and publication of educational material and the holding of conferences, seminars, and meetings, and
- b) The maintenance of high standards of practice and professional care amongst those working within the industry and the promotion of improved safety standards for the protection of the general public.

Although it might appear that the IRSE is concerned only with railway signalling, the full text of the objects makes clear that all forms of train control and traffic management, and communications systems, are all within our scope of interest.

There is a clear emphasis in the objects on 'public benefit'. This is most obvious in the sense of contributing to safety on the world's railways, where train control systems play a critical role. But we are also interested in ensuring that railways are efficient, cost-effective, and sustainable (in the widest sense).

We meet our obligations to the public through the following principal mechanisms:

- The dissemination of knowledge, experience, and good practice in the fields of railway signalling, control and communications and allied topics, to help ensure that those working in the profession do so with the best available knowledge for the safe, efficient and cost-effective construction and operation of the world's railways;
- The delivery of examinations at certificate and advanced level which contribute to the assurance of knowledge gained. In addition, through the application of the Engineering Council UK licenses the assessment and entry of Chartered, Incorporated and Engineering Technicians onto the Register of Professional Engineers;

- The provision and management of the IRSE Licensing Scheme to assure the competence of those working in the profession. The Scheme is focussed predominantly, but not exclusively, on ensuring safety in the design, construction, testing and maintenance of signalling and telecommunications systems;
- Our Code of Professional Conduct, with which IRSE members are required to comply in the course of their work. It emphasises topics such as personal responsibility for work undertaken or managed by IRSE members, the importance of safeguarding the public interest (particularly safety), environmental management, the efficient use of resources, handling conflicts of interest etc.
- Undertaking specific initiatives to help ensure the safety and efficiency of railways.
- By bringing the IRSE sections around the world together, we will facilitate the sharing of best practice and new initiatives to help engineers and others enhance their knowledge and professionalism. We will continue to reach out and grow our network of professionals around the world to harness the collective knowledge they possess for the benefit of all operators and users of railway transport.

The financial resources of the Institution are applied to achieve the objects of the Institution, in addition to which members make a significant contribution to delivering the Institution's aims by their volunteer activities. The Institution has only a small number of full and part-time staff and most of the activities are organised by our members acting in a voluntary capacity.

Reported on other pages in this report is the Institution's intention to petition for a Royal Charter. The charitable objects of the Institution will not be changed because of this action. It is expected, however, that the gaining of a Royal Charter will help to increase the influence the Institution has on the global stage.





# Our Strategy

Our five-year strategy document 'Beyond a 2020 vision' is coming to the end of its period. As a result, work began at the IRSE Council strategy day to begin to draft the strategy for 2025 and beyond. Currently under the working title of Horizon '25 this document will set out the direction of the Institution for the next five years taking us to 2030. Many of the objectives which were set in Beyond a 2020 vision have been delivered or will be by the end of 2025.

As a result, a new set of milestones and targets will form the backbone of the new strategy document. Key elements will still address the main charitable objects of the IRSE. Focus on giving more people access to the information provided by the Institution for all those who have an interest in safe and efficient railways will continue to be a main driver for the IT systems. Enhanced communications, taking advantage of improvements in intelligent systems will contribute to this goal. This annual report elaborates on the work we continue to do to facilitate more access to the vast wealth of knowledge that exists within our global membership.

Our engagement with international members has grown through international travel by the presidential team and the executive. This has led to important discussions on how we can better serve the growing numbers of members in what currently stands at 58 countries around the world.

There is strong commitment from staff and volunteers, and this has resulted in a growth in our operational areas aligned with our key focuses of Engage, Grow, Develop, Network and Assure. A study of the key indicators within this report will show an increase in all these areas. Building on the study of the international workforce in train control, there is a



greater outreach to a wider audience. As a result of a better understanding of the markets we are operating in, we can target specific groups and respond to requests to engage with different bodies. The development of an International committee of senior leaders in the sector is a direct result of this work.

Following the agreement of the membership to increase the standing of the IRSE in political circles by petitioning for a Royal Charter, work on this will continue into 2025.

While the Horizon '25 document is being drafted, the Beyond a 2020 vision document remains in action and the key elements can be seen in the infographic at the bottom of the page.

The IRSE International Convention in Canada gave attendees the opportunity to get a closer look at how the work of the IRSE is impacting the skills and knowledge of the sector in a practical setting. Later in the report there will be information regarding the impacts of our international engagement on competence development, including work with the Australian engineering licensing authority, and Indian railways.

## The five key elements of the IRSE strategic plan are



### Engage

Digital platform for a global professional body 24/7/365, early careers support, communicate best practice in ethics, diversity, inclusivity, produce technical documentation, knowledge transfer activities.



### Grow

Peer recognition, professional development, practice support and guidance, support in professional obligations, Advance profession.



### Network

Global local section development, International Technical Committee support, conferences, seminars and conventions, facilitate collaboration, latest information and news.



### Develop

Signpost professional development, awards & bursaries, upskilling and re-skilling, examination, apprenticeships, promote benefits to the public.



### Assure

International professional recognition, flexible pathways to professional registration, offer regulation in professional conduct, operate the licensing scheme.

# Governance

## Council

The IRSE is governed by an elected Council of 18 Corporate members, together with the presidential team and two co-opted past presidents, who are the trustees and directors of the Institution. The president takes the role of chair of Council. The full list of Council members for 2024 can be found on page 19.

Seven meetings of the Council were held during the year in which the business of the Institution was conducted. In addition, the Council held a strategy day on 25 August prior to the start of Convention '24 in Toronto.

To assist members of Council in different time zones to attend meetings, start times are adjusted so that not all meetings are held during UK business hours.

Although this was to improve attendance for international members, the numbers attending are not as high as previous years. This has been addressed through the publication of a code of conduct for Council members which will be adopted in 2025 when the new Council takes their seats. This code of conduct will set out the expectation of members who represent those who have elected them to office, including regular attendance at meetings.

The Articles of Association permit the current chairs of all local sections, principal committees and country vice-presidents to attend Council meetings as

observers. During the year several chairs and country vice-presidents attended meetings all of which were conducted via video conferencing. The strategy day was a mixture of face to face and online discussion. That meeting was only for Council members.

In addition to conducting all the normal Council business during the year, Council discussions included the following topics:

- The application for recognition as a Chartered Professional Body, in line with the increased standing of the Institution in an international capacity.
- Monitoring the implementation of a trial of the role of the regional section leader.
- Receiving the work of the various Council mandated working groups including Equality Diversity and Inclusivity, Volunteer recruitment, Fees working group and the newly renamed Governance oversight Committee formerly the Governance working group by the Council portfolio holders.
- Monitoring the succession plan for the office of president.
- Advising on the legal challenge to the PWI rebrand to the Institution of Railway Engineering.

Council also receives and reviews the annual report from each of the international sections of the IRSE.



[irse.info/governance](https://irse.info/governance)

## Committees

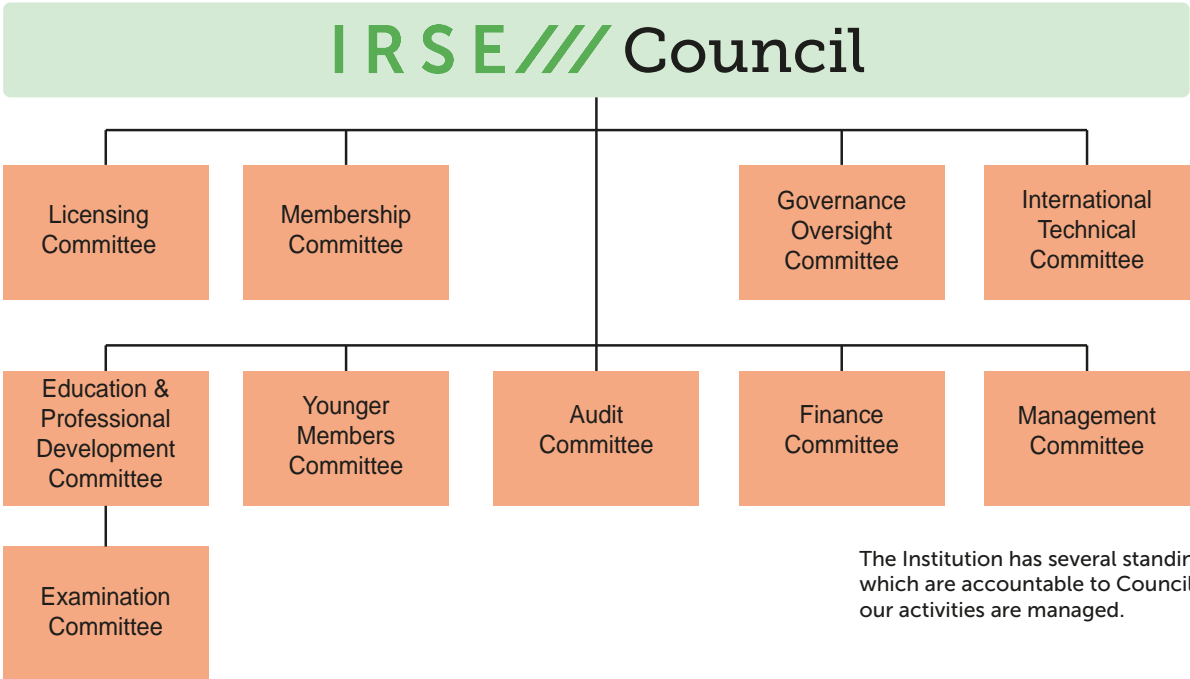
The Institution has several standing committees which are accountable to Council, through which our activities are managed. The principal committees and their relationships to Council are shown in the diagram below. In addition, task and finish working groups are formed from time to time which focus on specific areas of interest.

To assist in driving key areas of the Institution members of Council are allocated portfolios of responsibility.

## External audit

Several areas of the Institution's business are audited on a regular basis by various external audit bodies:

- All areas of finance are subject to audit annually by independent external auditors who submit their report to the Annual General Meeting.
- The Licensing Scheme is subject to an annual external audit by the United Kingdom Accreditation Service (UKAS).



The Institution has several standing committees which are accountable to Council, through which our activities are managed.

- As a registered Charity, the Institution is subject to periodic external review by the Charity Commission.
- As the Institution is licensed by the Engineering Council in the UK to register Chartered and Incorporated Engineers and Engineering Technicians, it is subject to a review every five years by the Engineering Council to ensure compliance with their registration standards.

### Internal audit

The IRSE's internal Audit Committee undertakes independent audits to complement the external audits, to ensure the Institution is running efficiently and effectively. The audits focus primarily on the role and remit of each of the principal committees of the Institution.

The Audit Committee normally performs two audits per annum. Each audit results in a report, which is presented to the chair of that committee, the chief executive and subsequently the Council, which uses the recommendations to improve the management of the Institution's affairs for public benefit and for the benefit of its members. The Institution maintains a risk register, which is reviewed annually by Council, and this is used as the basis for audit.

### IRSE Enterprises

IRSE Enterprises Ltd is the trading company wholly owned by the Institution. The trading company handles several activities which are associated with but outside the direct scope of the charity.

The board is made up of representatives of Council and is chaired by the immediate past president.

The directors of the company appointed for the year April 2024 to April 2025 were:

- Chair (immediate past president): Steve Boshier FIRSE
- President: Jane Power FIRSE
- Senior vice-president: Bogdan Godziejewski FIRSE
- Junior vice-president: Rod Muttram FIRSE
- Junior vice-president: Harvinder Bhatia FIRSE
- Chair of Finance Committee: Andy Knight FIRSE
- Licensing Committee Representative: Paul McSharry MIRSE
- IRSE treasurer: Andrew Smith FIRSE
- Company secretary (CEO): Blane Judd

Profits from the company when generated are gift-aided back to the Institution.

### Sections

The IRSE sections around the world exist by authority of the IRSE Council, and they operate in accordance with a set of Articles of Association (or Bye-laws) that have been approved by Council. At the end of 2024 there were 23 sections in total, 15 sections outside the UK in various parts of the world (Australasia, China, France, Hong Kong, Indian, Indonesia, Ireland, Japan, Malaysia, Netherlands, North America, Singapore, Southern Africa, Switzerland, Thailand) and six UK-based. The North America Section includes the USA, Canada, and Mexico. The Irish Section includes both Northern Ireland and the Republic of Ireland.

Two other sections also exist – the Younger Members' Section and the Minor Railways' Section. These are not geographically based, and their activities are predominantly within the UK, although work is being undertaken to extend this internationally where geographical sections also have younger members' groups.

Each section has an organising committee, with elected officers for key roles.

## Equality, Diversity, Inclusivity

The IRSE Equality, Diversity, and Inclusivity (EDI) Group, chaired by IRSE junior vice president Harvinder Bhatia FIRSE, has been meeting regularly to formulate an approach towards developing the IRSE's vision, strategy, and plan for EDI.

This is important for the IRSE so that it is able to attract and retain members from diverse groups – both nationally and internationally – including those who may previously have had challenges joining professional institutions.

Through this, the IRSE aims to create a sense of belonging for its members and stakeholders. An initial EDI culture survey was sent to IRSE section committees last year to gain insight around the key issues from their perspectives.

The EDI Group also became aware of the Royal Academy of Engineering's Diversity & Inclusion (D&I) Progression framework which is made available to professional institutions to measure EDI maturity. Council endorsed a recommendation from the EDI Group

to adopt this framework and use it to develop the IRSE's vision, strategy, and plan for EDI. The framework looks at progress in 10 key areas, in terms of four levels of good practice.

The framework has initially been applied to five areas: governance and leadership; membership and professional registration; meetings, conferences and events; education and training, accreditation, and examinations; and prizes, awards, and grants.

The EDI Group concluded that whilst the IRSE is predominantly at level 1 in these areas, there are pragmatic actions that we can take to improve.

Just a few of the examples of some of the initial actions identified are:

- Updating the existing IRSE statement on EDI to ensure our vision and ambition is made clear.
- Making the process of appointment to leadership positions clear and transparent.



[irse.info/edi](https://irse.info/edi)

- Requiring committees to actively consider how they can increase diversity of their membership.
- Gathering data on the demographics of the organisation and its leadership across all IRSE committees. Also gathering data to understand the current position in relation to EDI items so that we can establish where we need to improve.
- Increasing diversity of speakers and attendees at IRSE conferences events.

Work on this important area of the Institution's development continues, and we will continue to keep members informed of our progress.

# Professional development

A key objective of the IRSE is to support the professional development of IRSE members, prospective members and licence holders. To do this, we have the Education and Professional Development (E&PD) committee and the Examination committee working with Judith Ward FIRSE, our head of technical, and Zachary Smythe, our professional development officer.

## E&PD Workplan

The E&PD committee is now working to the workplan derived from feedback from the membership.

There are 31 specific initiatives aligned to the IRSE’s strategic goals which are designed to:

- Improve the availability and accessibility to technical knowledge.
- Increase engagement with younger engineers.
- Reduce the UK centric focus in the committee’s work and membership.
- Provide increased learning opportunities.
- Continually review and improve the content, profile and governance of the IRSE examinations.

The E&PD committee is primarily made up of volunteers and this limits the volume of activities that can be delivered. Anyone who would like to get involved in delivering the committee’s work is welcome to contact the secretary via [contact@irse.org](mailto:contact@irse.org)

## IRSE Professional Examination

The IRSE Professional Examination, now known as the Advanced Diploma in Railway Control Engineering, is a Masters-level academic qualification which tests knowledge and understanding of railway systems with a particular emphasis on safety. Successful exam candidates must pass all four mandatory modules.

Passing the IRSE Advanced Diploma is one route to obtain Corporate membership of the IRSE and it can ‘top up’ engineering or technology qualifications for professional registration with UK’s Engineering Council.

The Certificate in Railway Control Engineering Fundamentals covers all aspects of railway control engineering at a foundation level. It is a stand-alone qualification as well as a mandatory module for anyone wishing to pass the Advanced Diploma. It is a valuable qualification for those in the railway control systems industry – for new entrants and those wanting to demonstrate their wider knowledge, as well as for those who are outside our industry – those working in other interfacing disciplines and those who are interested in potentially joining the industry. Candidates for the Certificate do not have to be IRSE members. Passing the IRSE Certificate is one route to becoming an Accredited Technician or Associate Member.



[irse.info/irseexam](https://irse.info/irseexam)



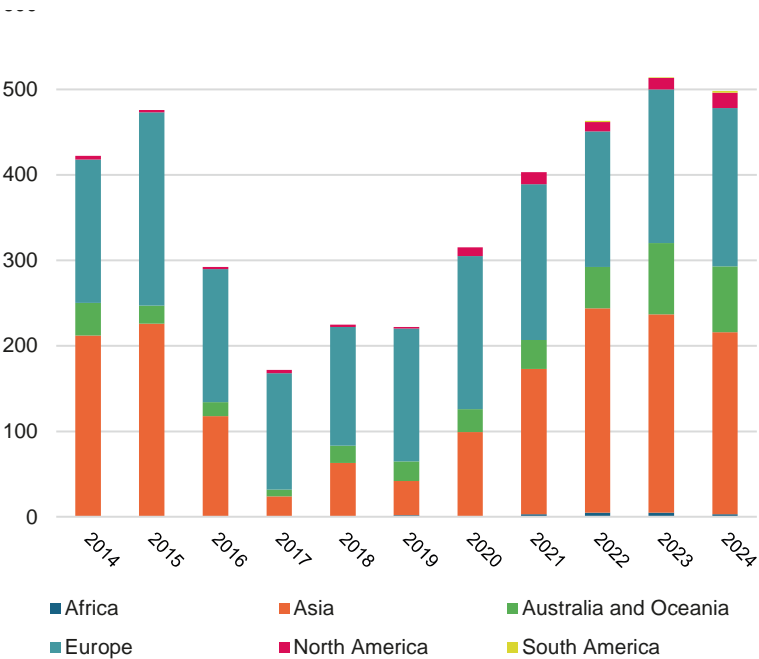
[irse.info/cpd](https://irse.info/cpd)

Exams were held in 2024 on Saturday 23 March (Certificate only) and Saturday 5 October (all modules). Most exam candidates are now outside Europe, reflecting the continued global diversity that this core activity of the IRSE now achieves. All exams were held online again, with candidates monitored by remote invigilation software and answers checked by anti-plagiarism software.

The quality of answers from candidates was good, with the overall percentage of those achieving pass grade or higher in the Certificate was 68% in March and 59% in October, remaining with the norms, and for Modules B-D was 50%.

Yet again for the Certificate, not only was the number of non-UK candidates significantly higher than UK candidates, but also the number of IRSE non-members who passed was higher than IRSE members.

Looking at exam entries by continent 2014 to 2024 shows the breadth of appeal of our qualification.





All non-members who sit the Certificate are encouraged to become members, particularly those who have passed.

Many volunteers run exam study groups, the independent exam forum website and support the younger members' exam workshops to provide support for prospective examination candidates. All these continued to be run throughout 2024, some in-person, hybrid, or online.

The E&PD committee extends its thanks to all those who contributed significant amounts of time and efforts to these various learning opportunities.

### Continuing Professional Development (CPD)

The Engineering Council requires that as of 2020, those who do not engage in the CPD monitoring process are removed from their register. Monitoring took place during 2024 of randomly chosen members for their CPD activities in the previous year.

Information about the importance of developing and maintaining members' professional competence through CPD has continued to be provided through IRSE News and the website.

The IRSE recommends the use of the Engineering Council 'Mycareerpath' system for CPD planning, recording, reflecting and reviewing. More information about Mycareerpath is available on the IRSE website, [irse.info/usingmycareerpath](https://irse.info/usingmycareerpath)

### Certified courses

The IRSE offers a process by which training providers can have their courses assessed and certificated by the IRSE. Some training providers are in the process of having their signalling and telecommunications courses assessed, and RT-Infrastructure and Wray Castle had their courses certified in 2024.



[irse.info/usingmycareerpath](https://irse.info/usingmycareerpath)

### Learning materials

The IRSE publishes a number of textbooks which are useful to IRSE members and non-members for their study and information within railway control and communications systems. A textbook synopsis is published on the website (covering 15 volumes) to help people find the most suitable textbook(s).

## Licensing

The IRSE Licensing Scheme provides assurance about the competence of individuals to carry out technical safety critical or safety-related work on rail control systems.

During the year, there were some changes to the licensing staff. Roger Button retired in February 2024, and Jahanara Khatun joined the team as a licensing administrator in April, replacing Lise Marie Ake-Danho.

The Licensing team continues to work closely with the Licensing Committee, which is now chaired by Andrew Simmons following the retirement of Colin Porter HonFIRSE (see page 11).

In 2024 a total of 1747 licences were issued, which is an increase of 417 on the previous year. As of December 2024, there were 5,856 active licence holders, which represents an increase in the total number of licences held in December 2023 (5,678).

The Licensing Scheme holds full accreditation by the United Kingdom Accreditation Service (UKAS) for all its operations and was satisfactorily audited by UKAS in April against the competence standard for bodies involved with the certification of persons: ISO17024:2012.

IRSE Assessing Agents are approved and appointed for the purposes of performing assessments of candidates for licences, and they are an essential



[irse.info/licensing](https://irse.info/licensing)

part of the Licensing Scheme. The number of approved assessing agencies now stands at 23 as we now have two new assessing agencies, Metro Trains Australia (MTA) and NILA.

RailTel in India and TPS have also now applied to open agencies.

## IRSE volunteers

Our volunteers have continued to support the institution throughout 2024, giving their expertise, time and enthusiasm. Areas of this work include, but are not limited to: local section committees; organisation of Toronto International Convention 2024; annual dinner; the International Technical Committee; running study groups, being on and contributing to Council; exam question setting and marking; reviewing

applications for professional registration; and writing, producing and editing IRSE News and textbooks.

Our volunteers develop useful skills, knowledge, experience and networking contacts through the work which they do for the Institution which they may not get the opportunity to gain within a work environment. If you are interested in becoming a volunteer for to the IRSE,

please contact your local section or [contact@irse.org](mailto:contact@irse.org) saying how you would like to contribute.

Thank you, to all our IRSE volunteers, you are an essential part of our institution, without whom the Institution would not be able to perform all its duties, supporting the governance, running and reputation of the IRSE locally and nationally.

# Membership and Registration

Membership and Registration committee meetings and professional registration interviews continue to be held online using Microsoft Teams. We have 15 members of the committee and 14 active professional registration assessors, some of whom also sit on the Membership and Registration Committee. The time, commitment and contribution of all involved is invaluable to the membership and registration process and is much appreciated. We actively welcome additional volunteers to support the process.

The Membership and Registration team continues to improve and strengthen processes to ensure that the data we hold for our members is as accurate as possible. We continue to improve our subscription collection processes so that the Institution can continue to support its members in the best way possible and continue to improve the services it provides.

### Membership

The total membership of the Institution increased by 17 over last year's reported figure, with 5,156 members as of 31 December 2024 across 58 countries, 51% of members are within the UK and 49% are overseas.

We have processed 329 successful new membership applications during 2024, 157 for corporate grades and 172 for non-corporate grades. However, unfortunately 21 of the 329 new and a further five from 2023, members failed to pay their first membership subscription, despite several reminders, resulting in their membership being terminated, 21 were non-corporate and five were a corporate grade.

The final number of new members joining the IRSE over the year was therefore 308 (152 corporate and 156 non-corporate).

In addition to the new members detailed above there were 76 successful applications from existing members transferring to a higher grade of membership.

During 2024 the IRSE Council received and supported nominations for transfer of two existing members to the grade of Honorary Fellow (HonFIRSE). These were Hedley Calderbank HonFIRSE and Colin Goodman HonFIRSE.

The IRSE Council has also approved nominations for a further two Companion members bringing the total number to 21. These were Richard Leary – CEO of the Toronto

Transit Commission (TTC); and Sanyawit Aphichatapong – deputy chief signalling engineer for the State Railway of Thailand (SRT).

In February 2024, 176 memberships were terminated due to non-payment of the 2023/24 membership subscription. However, seven memberships were then reinstated following late payment of their subscription and a further four after payment of current and previous years subscriptions.

There were 106 membership resignations over the year, including one member who joined and resigned in 2024. We track and report the reasons for resignation which continues to be primarily due to retirement from the industry or people changing direction in their careers.

The Institution was sad to report the deaths of 17 members during 2024, these are listed below. Many were strong supporters of the Institution, including three IRSE past presidents, who had held membership for a considerable number of years, eight of whom had held membership for more than 50 years. In various ways they had all made significant contributions to the Institution's work and will be missed.

- Robert Henry Blyth FIRSE
- Willem (Wim) Jan Coenraad HonFIRSE
- Alex John Daley AMIRSE
- Marmaduke Westell Dodds (Affiliate)
- Robert Edward Duffy MIRSE
- William Ronald Farrow-Smith (Affiliate)
- Geoffrey (Ian) Foster FIRSE
- Richard Griffin AMIRSE
- Edward Peter Ashley Holman FIRSE
- Trevor Richard Lampen FIRSE
- Malcolm Lionel Menadue HonFIRSE
- John Richard Sadler FIRSE
- Peter William Stanley CEng HonFIRSE
- John Adrian Sweet (Affiliate)
- Guy Whaley FIRSE
- Stephen Glenn White MIRSE
- Francis Philip Wiltshire CEng HonFIRSE

Membership by grade at 31 December 2024.

Membership grade	Members
Affiliate	1283
Accredited Technician	179
Associate Member	1088
Member	1961
Fellow	567
Honorary Fellow Corporate	55
Honorary Fellow Non-Corp	2
Companion	21



irse.info/membership



irse.info/proreg

### Professional registrants

The total number of members holding professional registration with the Engineering Council, the UK regulatory body for the engineering profession, increased by 44 over last year's reported figure, with 498 members holding professional registration as of 31 December 2024.

During 2024 the Institution has supported a further 52 engineers to achieve their professional registration goals – 12 Chartered Engineers (CEng), nine Incorporated Engineers (IEng) and 32 Engineering Technicians (EngTech). In addition, we have had six members transfer their registration from another institution to the IRSE, five CEng and one EngTech, and one existing IEng member transfer to CEng. In 2024 12 members lost their registration due to resignation or non-payment of subscriptions – four CEng, two IEng and six EngTech. There were also two CEng members who have sadly passed away.

On 31 December 2024, the Membership and Registration team were supporting a further 135 applicants who were at various stages of their professional registration journey.

Professional registrants at 31 December 2024.

Professional title	Members
CEng	197
IEng	104
EngTech	197

# Awards

The IRSE makes several awards each year which recognise, reward and celebrate excellence, inspire colleagues and encourage the professional development of engineers, particularly

those in the early stages of their careers and promote the Institution within train control and communication systems engineering.

A number of the awards are presented by the presidential team at the annual member's lunch.

## Special Lifetime Achievement Award

### Colin Porter

The IRSE Council unanimously resolved to present Colin Porter HonFIRSE with the first-ever Special Lifetime Achievement Award for his decades of exceptional service.

Colin began his S&T career in 1968 as an engineering scholar with British Rail and joined the IRSE in 1969. His contributions started in the 1970s when he joined the Student and Graduate Committee. He became a Graduate Member in 1974, received a

Thorowgood scholarship in 1975, and became a Member in 1981. Elected to Council in 1983, he implemented the IRSE's first computerised membership records system.

As a Fellow and treasurer, he introduced the Institution's first computerised financial records in 1986. In 1991, he chaired the Licensing Subcommittee, developing the IRSE Licensing Scheme after the Clapham accident, launching it in 1994.

Colin served on key committees, including Management, Finance, Membership, and Licensing. In 2005, he was a founding Director of IRSE Enterprises Ltd. Elected IRSE President in 2003, he remained on Council until 2006 before becoming Chief Executive and General Secretary (2006–2015).

He was made an Honorary Fellow in 2007 and awarded the President's Medal in 2015. From 2015 to 2024, he chaired the Licensing Scheme.

## Dell Award

### Byron de Lange

The Dell Award is made annually under a bequest of the late Robert Dell OBE (past president). It is awarded to a member of the Institution employed by London Underground (or its successor bodies) for achievement of a high standard of skill in the science and application of railway signalling. The award takes the

form of a plaque with the recipient's name engraved upon it.

Byron de Lange AMIRSE was the recipient of this award for 2024. He began his career in 2014, joining Transnet's signalling design office in Durban, South Africa. After eight years at Transnet Byron was appointed as a

senior signal engineer for Equipment Engineering Services at Transport for London. Since then, he has supported signal operations, undertaking a wide range of projects to improve overall system reliability and performance which have delivered clear benefits to Transport for London and its passengers.

## IRSE-Signet Award

### Scott Cadzow

The IRSE-Signet Award is made annually to the candidate who achieves the highest marks in any single module of the Exam (modules B, C or D). The Award is made jointly by the IRSE and Signet Solutions Ltd and was introduced on the 20th anniversary of the formation of the company. The winner receives an

trophy and £1500 funding to support attendance at the annual International Convention or ASPECT conference.

This year's winner was Scott Cadzow MIRSE, a principal signalling engineer with Network Rail. Scott joined Network Rail in 2008, working in a number of

signalling and maintenance roles before moving to asset management last year.

Scott has completed the Certificate in Railway Control Engineering Fundamentals (Module A) and Railway safety and systems engineering (Module B) of the Advanced Diploma in Railway Control Engineering.

## Thorowgood Scholarship

### Jennifer Kirk

The Thorowgood Scholarship is awarded under a bequest of the late W J Thorowgood (past president) to assist the development of a young engineer employed in the signalling and telecommunications field of engineering. The award is made to a candidate who has excelled in the IRSE professional examination and comprises of an engraved medallion and funding for a study tour of railway

signalling installations or signalling manufacturing facilities

Our winner this year was Jennifer Kirk AMIRSE who joined the railway as a Year-in-Industry student whilst studying at Manchester University. She returned to Network Rail, becoming an assurance analysis specialist, during which time she completed an MSc in Railway Systems Engineering and Integration at the University of Birmingham.

Jennifer is currently a senior project engineer on the TransPennine Route Upgrade ETCS project. In the IRSE professional examination, she earned a distinction in Module C and a pass in Module D in October 2023, following credits in Module B (October 2022) and the Certificate in Railway Control Engineering Fundamentals (Module A) (March 2022).

## Frank Hewlett Bequest and Alan Fisher Memorial Fund

Hewlett Fisher Bursaries are awarded annually to enable IRSE early careers members to travel to the international Convention or ASPECT conference in the year. They are made through a bequest of the late Frank Hewlett (IRSE member) and a fund established in the memory of the late Alan Fisher, who died during his IRSE presidential year. A number of bursaries are awarded each year and provide funding towards travel and accommodation.

Fifteen IRSE members in their early careers were awarded Hewlett Fisher Bursaries to attend Convention 2024 in Toronto: Davis Kitagawa AMIRSE, Rohit Yadav MIRSE, Yuk Fei Poon (Affiliate), Glenn Mitchell MIRSE, John Carter (Affiliate), Tiffany Wong AMIRSE, Anastasia Ivanova AMIRSE, Rushan Pun (Affiliate), Spoorthi R (Affiliate), Hanumesh Pujar (Affiliate), Harry Morgan (Affiliate), Wessel van den Brink AMIRSE, Pavitra Utlal (Affiliate), Jack Neil AMIRSE and Ben Stockton (Affiliate).



[irse.info/awards](https://irse.info/awards)

## IRSE Companions

### Richard Leary and Sanyawit Aphichatapong

IRSE Companions are persons who are, by their association with the profession, or through their occupation of a position of eminence, desirous of furthering the objectives of the Institution and (in the opinion of the Council) are worthy of such admission.

In 2024 Richard Leary, CEO of Toronto Transit Commission, and Sanyawit Aphichatapong, The State Railway of Thailand, were made IRSE Companions.

## Honorary Fellows

### Hedley Calderbank and Colin Goodman

IRSE Honorary Fellows are persons who, in the opinion of the Council, have rendered outstanding or exceptional services to the profession, or the Institution, or have furthered the objects of the Institution, and are deemed by the Council worthy of such admission.

#### Hedley Calderbank HonFIRSE

Hedley has been the strongest supporter for the development and evolution of Module A of the IRSE examination to become the Certificate in Railway Control Engineering Fundamentals. He has encouraged and numerous members to write exam

support materials and has written material himself.

He re-organised the structure of the Certificate to simplify preparation and presentation of relevant reading material and led the evaluation, selection and introduction of a new online question system for the exam.

#### Colin Goodman HonFIRSE

The IRSE received Engineering Council approval in 2000 to register members for professional registration (EngTech and IEng) and later in 2003 (CEng). Non-standard route applications, those

who do not follow the accredited degree programmes, are assessed on an individual basis by the Individual Case Panel (ICP). Colin has had a large part in these assessments and joined the ICP through his academic background at the University of Birmingham since 2009/2010.

Colin has also been involved in the set up and teaching of the Master of Science (Safety and Control Systems & Railway Systems Engineering and Integration) and the equivalence of the Safety and Control Systems MSc to the IRSE professional exam.

## Merit Awards

### Derek Hotchkiss, Rod Muttram, Frazer Howie and Michael Murphy

Nominations for IRSE Merit Awards are welcomed from IRSE members and section committees. They are made to an IRSE member, member of staff, or another person to recognise meritorious service to the IRSE. This could be by making a substantial contribution to the Institution's work over a period of time by organising activities or carrying out specific tasks which have furthered the IRSE's aims and objectives.

#### Derek Hotchkiss HonFIRSE

Derek has been an active member of the institution's examination committee since 1969. He has contributed to the setting of hundreds of exam questions and has undertaken the marking of thousands of written answers from candidates who have

sat the examination. Derek is one of the examiners aligned with the examination's Module C 'Principles of railway control and communication systems' and his work for the committee continues unabated.

#### Rod Muttram FIRSE

Rod has supported the London & South-East Section since its inception in 2018 as a committee member. He has arranged presentations, technical visits and supported the work of the committee. As a member of the IRSE's International Technical Committee he has contributed greatly to the academic resources of the Institution, delivering papers as part of presidential programmes and at ASPECT conferences and IRSE conventions.

#### Frazer Howie MIRSE

Frazer was presented with his Merit award in recognition of his tireless contribution to the Scottish Section as secretary over the past 10 years. Each year he takes an active role within the Scottish Section IRSE exam study group willingly sharing his own experience and knowledge with students.

#### Michael Murphy MIRSE

As events organiser Michael has been a key member of the IRSE Irish Section committee since its creation in 2014. Over the years, Michael has been a key driver in the organisation the annual dinner dance, technical papers, highly successful technical visits, Rivval Golf annual event and IRSE presidential visits.



# Global office and personnel

The Institution continues to lease offices on the 5th floor of the Institution of Mechanical Engineers (IMechE) building at One Birdcage Walk, London, UK. It is from this self-contained space that the centrally organised activities of the IRSE are managed – membership and professional registration, licensing, IRSE exam and events administration as well as financial administration.

We continue to operate a hybrid working environment with staff spending time within the global office and working from home.

## Chief executive

The chief executive and general secretary of the Institution is Blane Judd, a Chartered Engineer and Fellow of the Institution of Engineering and Technology. He is responsible for directing and managing the resources of the Institution to implement decisions of the Council in an efficient manner and in compliance with UK company and charity law. He is accountable to the Council and provides the focal point of contact for other institutions and external organisations, including the UK's Engineering Council, the Royal Academy of Engineering, government agencies, the chief officers of other professional bodies, and the scientific, engineering and technology community. He is also responsible for ensuring

compliance with the requirements of the Institution's Articles of Association, Companies House, the Charities Commission and relevant legislation. The chief executive is supported by a senior leadership team.

## IRSE staff team

Our organisation structure as of 31 December 2024 is as shown in the chart below. There have been the following staff changes during 2024.

**Role changes:** In June Judith Ward, previously director of operations took on a new role as head of technical and reduced to three days per week; Polly Whyte moved from head of membership & registration to the head of operations role and reduced to four days per week and Sophie Hunter was promoted from membership & registration officer to head of membership & registration.

**Joiners:** Jahanara Khatun in April as licensing administrator (assessments); Parma Singh in July as membership & registration officer.

**Leavers:** Roger Button in February, previously licensing officer; Lise Marie Ake-Danho in March, previously licensing co-ordinator; Parma Singh in November, previously membership & registration officer;

Zachary Smythe in December, previously professional development officer.

## Contract support

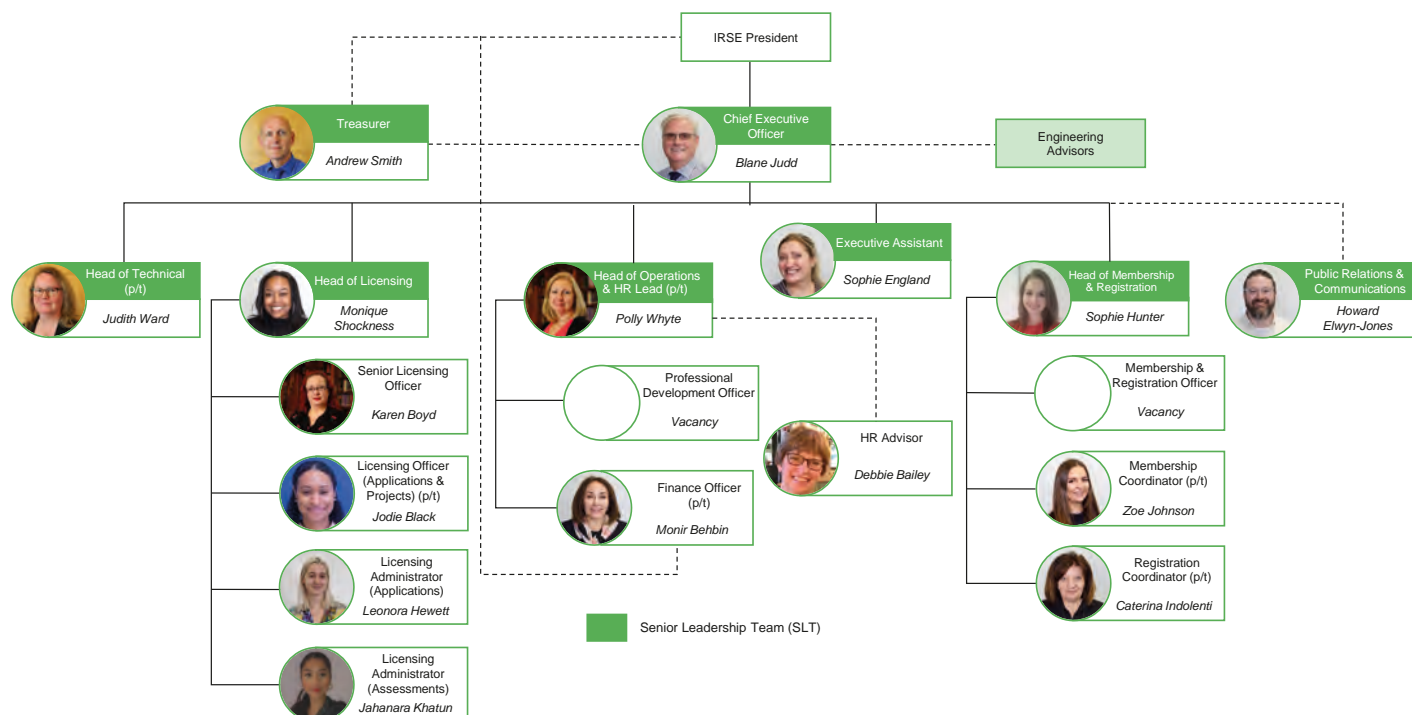
The following members of the team work on a part-time contract basis.

The IRSE is supported in its PR and communication activities by Howard Elwyn-Jones and his team at Prettybright. We also receive excellent support from Prettybright on a wide range of social media activity, which includes the e-bulletin and the recording and video livestreaming of many of our events.

Andrew Smith is the Institution's treasurer, with responsibility for producing budgets and accounts, and for monitoring the health of the Institution's savings and investments.

Debbie Bailey is a Chartered Member of the Chartered Institute of Personnel and Development and supports Polly Whyte as HR Advisor, Polly continues to have the role of HR Lead in addition to being head of operations.

Lindsay Jones of LJPR Ltd, a qualified journalist with an MSc in PR, continues to support the IRSE with specific PR and communications projects, namely around the Institution's work to secure a Royal Charter.



# Presidential programme

Each year the IRSE president plans a programme of major events, comprising a series of high-profile technical papers, lectures, face to face events and visits to IRSE sections across the world. Our president to April 2024 was Steve Boshier FIRSE whose presidential theme was 'Global Integration – people process and technology'.

The final two papers in Steve's year were 'Signalling globalisation from a New Zealand perspective' presented by John Skilton, programme director, Future Rail Systems, KiwiRail and 'Training and management of signalling competency for railway infrastructure across Aus/NZ will it ever be simplified?' delivered by Richard Mifsud, JMD Railtech Group.

Jane Power FIRSE, our president from April 2024, chose 'Power to the People' as the theme for her year focusing on 'Unsung Heroes' to shine a light on some under-appreciated areas of the industry.

The seven lectures in the presidential programme in 2024 were:

- 'Workforce challenges and successes in London Underground's 4 Lines Modernisation Project' presented by Richard Kirby from Hitachi Rail and Sam Etchell from Transport for London.
- 'Demystifying the Safe Braking Model' delivered by Matthew Shelley, Hitachi Rail.
- 'The role of the operator' by Mike Palmer, Parsons Corporation, Toronto.
- 'Lessons remembered – the Asset Engineer' presented by Jerry Carter MIRSE, retired TfL.
- 'Assuring resilient interfaces' delivered by Stephen Turner MIRSE, Stockton Engineering Management.
- 'Engineering technicians' presented by Paul McSharry MIRSE, Kilborn Consulting and James Heaton MIRSE, KeolisAmey Docklands.



[irse.info/unsungheroes](https://irse.info/unsungheroes)

- 'Knowledge retention of legacy systems within the railway industry' delivered by Istvan Darazsi, Iarnród Éireann Irish Rail.

Two more papers in the series were to be presented in 2025.

All presidential papers are published in our monthly journal, IRSE News, and the presentations are available to watch on the IRSE Vimeo channel [irse.info/unsungheroes](https://irse.info/unsungheroes)

Jane also initiated a new seminar on Artificial Intelligence in railways, available on a pay to view basis at [irse.info/aivideo](https://irse.info/aivideo)

## Section activities

In addition to the presidential programme, every year there is a programme of lectures, seminars and technical visits organised by the Institution's 23 sections across the globe.

Our sections are in Australasia, China, France, Hong Kong, India, Indonesia, Ireland, Japan, Malaysia, Netherlands, North America, Singapore, Switzerland, Thailand, and Southern Africa. Within the UK, sections cover London & South East, Midland & North Western, Plymouth, Scottish, Western, York and Minor Railways. We also have a Younger Members section.

The geographical sections vary considerably in size, from around 20 members up to several hundred, and in levels of activity.

Each has its own organising committee, elected officers and programme of technical and social events. They report annually to the Council on their work.

During 2024 sections across the world settled into their new post-Covid-19 'normal'. The pandemic necessitated major advances in on-line communication methods, and for some IRSE sections the ability to host virtual meetings had the effect of driving up membership.

Sections have found a happy balance between on-line, hybrid and face-to-face meetings and enjoyed being able to host international visitors once again. Highlights from 2024 include:

**Australasian Section:** held its first hybrid event with face-to-face attendance in Melbourne and online attendance via Teams. The event was attended by Global IRSE president Jane Power and included two papers and a panel session Jane also delivered a paper to their Younger Members Section.

**China Section:** held nine competency training sessions on Chinese railway signalling attended by over 500 engineers.

**French Section:** hosted IRSE president Steve Boshier at a section technical visit to the tram-train maintenance and storage site at SNCF Réseau.

**Hong Kong Section:** 23 members made a technical visit to Shenzhen BYD and sky-shuttle.

**Indonesia Section:** held an international webinar on 'Cyber Security in Railway in with 90 participants.

**Indian Section:** held three technical sessions and an evening programme in honour of Jane Power in her then role as senior vice president which was attended by 80 IRSE/ IRSTE members.



[irse.info/nearyou](https://irse.info/nearyou)

**Irish Section:** held its tenth anniversary annual dinner dance, attended by Jane Power. A presidential programme lecture was also delivered.

**Japan Section:** was planning for ASPECT 2025 to be held in Yokohama.

**Malaysia Section:** hosted an online evening talk on 'Future Railway Mobile Communications System (FRMCS)' presented by Hugh Lin Xiuduan, director of enterprise wireless network solution at Huawei APAC. Jane Power visited the section and gave a talk.

**Netherlands Section:** enjoyed a visit from Jane Power and a technical visit to York (UK).

**North America Section:** supported the 2024 IRSE International Convention in Toronto. Its AGM in Louisville was attended by Jane Power who also attended a trade show there.

**Singapore Section:** President Jane Power attended a joint seminar with the Institution of Engineers, Singapore (IES), and judged the young engineers presentation competition.

**Swiss Section:** a technical visit to the new interlocking at Geneva station attended by Jane Power.

**Thailand Section:** held technical meetings at Kasetsart University. Jane Power attended the AGM and visited Mahidol University.

**Southern Africa Section:** hosted Jane Power on a week long visit which included site visits, boardroom discussions with rail operators, manufacturers, rail safety regulator, and signalling service providers across Gauteng and in Cape Town.

**London & South East Section:** made a well subscribed technical visit to the ETCS simulator at Hornsey depot.

**Midland & North Western Section:** held an online technical presentation on 'Technology and Engineering Solutions for Improving Level Crossing Safety' with 132 participants.

**Plymouth Section:** held its annual social beer and curry night.

**Scottish Section:** held its very popular dinner with the pre-dinner panel discussion based on IRSE president Jane Power's presidential theme of 'unsung heroes'. Jane also attended the event.

**Western Section:** enjoyed a technical visit to see the latest control systems technologies including the Controlguide Westcad control panel at Siemens Mobility in Chippenham, with Jane Power in attendance.

**York and the North East Section:** held its annual dinner at the National Railway Museum.

**Minor Railways Section:** Joint visits with members from the Midland & North Western Section and the IRSE president to the private Fawley Hill railway and the Ffestiniog and Welsh Highland Railways.

The Council of the IRSE wishes to extend their sincere thanks to everyone involved in the operation of the local sections, for the excellent work they undertake. Council also very much appreciates the help and support given by many companies to the work of the sections. Charles Page continues his excellent work in the role of local section coordinator, supporting the sections.

## Younger Members

The IRSE Younger Members (YM) Section is open to all IRSE members under 35 years of age, or those who are within the first ten years of being in the industry. The YM Section has held online and in-person events over the past year and will continue to do so for the foreseeable future.

The events organised by the younger members can be attended by a person of any age and experience but are generally geared towards people who are within the first ten years of being in the industry.

In May, we hosted a presentation by members of the Transport for London Operational Technology Cyber Security Advisory team who presented on cyber security in the rail environment.

In 2024 we ran two study days. The practical-focused Signet Solutions study weekend took place in June 2024, where the focus was to look at and interact with physical equipment. A theory-based event took place at the University of Birmingham in July, providing sessions built around the Module B, C and D syllabus, including example scenarios and exam type questions to help with preparation for all exam modules.

The intent of these events is to take full advantage of the in-person aspect to differentiate from all the online events taking place. Unfortunately, over recent years it has become apparent that there may be challenges in retaining attendees between signing up and the day of the

event. This is something that we need to address going forward to ensure events remain accessible whilst also providing confidence to the volunteer organisers and presenters that events will be well attended.

The in-person study events are run by a dedicated group of volunteers and supporting organisations Signet Solutions and University of Birmingham, without whom it would not be possible to offer these fantastic opportunities. The YM section is incredibly grateful for the time, effort and generosity put in to planning, delivering and hosting these events.

In October, we facilitated the return of the Younger Members Conference in London, offering people in their early career the chance to explore the future of railway signalling and telecommunications and provide an excellent opportunity to hear from industry experts and grow their network.

Due to the issues around signups vs. actual attendances at the study events earlier in the year, we trialled applying a nominal fee at the point of sign up to reaffirm the commitment made when signing on to these in-person events and reduce the impact of last-minute cancellations and non-attendance. This trial was largely a success, as all who signed up and paid the nominal fee did indeed attend, however it is not clear at this stage whether this approach acted as a blocker to potential attendees who did not sign up as a result.



[irse.info/youngermembers](https://irse.info/youngermembers)



[irse.info/ymevents](https://irse.info/ymevents)

This approach is something we expect to continue to pursue next year for our more significant in person events, such as the weekend study events and conference, with the fee determined as appropriate for the content and commitment provided.

New members joined the committee this year and we continue to seek volunteers to help support in managing the YM Section activities. We will be looking to introduce changes to named positions on the committee to provide fresh impetus to our ongoing engagement with members and the industry.

To get involved contact us at [younger.members@irse.org](mailto:younger.members@irse.org). We are always looking for members to get involved from around the world. For details of future events follow us on our Eventbrite page [irse.info/ymevents](https://irse.info/ymevents)



# IRSE International Convention 2024

For the organisers of the 2024 International Convention Toronto the event was the culmination of a long journey.

The contract with the Marriott hotel for the Convention was originally signed in 2018. But then Covid-19 hit, and the event had to be postponed, before finally being able to take place in 2024.

In his opening address, conference organiser Yousef Kimiagar FIRSE, thanked the sponsors, organising committee, IRSE events co ordinator Paul Booth FIRSE and the venue for their continuing support during the lengthy intervening period. He then drew delegates' attention to the fact that a rising number of North American engineers were now licensed by the IRSE. Extolling the advantages of IRSE membership, he encouraged those licencees to become members and join the growing North American IRSE Section. Yousef acknowledged the presence of the current president, Jane Power FIRSE and thanked her for her support.

A total of 119 delegates attended the full Convention at the Marriott Courtyard Hotel in Toronto, with another 56 joining for the seminar day. Participants hailed from various sectors including rail operators (both private and public), equipment and technology suppliers, government delivery organisations, regulators, academic institutions, contractors, and consultants, creating an ideal mix of professionals in rail-related areas.

The conference provided an excellent opportunity to renew old industry relationships, share knowledge, and forge new connections.

The event was held from 26–30 August 2024. A land acknowledgment was made, recognising the traditional territories of Indigenous peoples.

The five day conference began with a seminar day divided into four sessions focusing on railway signalling. Adrian Peach FIRSE director of assurance at Hatch in Canada, welcomed delegates to the Convention seminar day and invited past president Dr Daniel Woodland FIRSE to give the first presentation. Fittingly, Dr Woodland was IRSE president at the time the Convention should have taken place.

The first session featured speakers covering their experience in bringing their methodologies and products into signalling applications in Canada and the USA followed by a section on metro control systems. The final discussions of the day focused on main line rail applications in Canada.

Delegates at the conference enjoyed 12 presentations from industry experts including a presidential programme lecture from Mike Palmer with the title 'Unsung heroes – the role of the operator in signalling projects', all of which are available free to view on the IRSE Vimeo channel at [irse.info/torontovideo](https://irse.info/torontovideo)



Technical visits to Eglinton Crosstown Light Rail Project and Hitachi Rail, Toronto Transit Commission (TTC) subway & streetcars and GO Transit and Union Station rail corridor followed over the next three days.

The conference began with a networking reception and ended with a gala dinner. The guest programme included a '30,000 Islands' boat cruise and visits to the Black Creek Pioneer Village, museums and art galleries. Thanks to the hosts Hitachi Rail, TTC and Metrolinx for allowing us to visit their facilities and to the generous support from our sponsors: Hatch for the cocktail reception; Platinum – TUV Rheinland and WSP; Gold – AtkinsRéalis, Frauscher, HNTB, Mott Macdonald, Unipart Rail, and Bronze – CPC, Gannett Fleming and Signet Solutions.







# International Technical Committee

The International Technical Committee (ITC) celebrated another successful year in 2024, holding their 83rd meeting. The committee's mission is to provide thought leadership for the IRSE and steer the direction of the Institution with respect to technical topics addressed through papers and other publications. A key gift of the ITC is the diversity of its constituents; it now has many fully participating and corresponding members from all over the world, including Japan, the UK, Germany, Switzerland, Belgium, Finland, France, the Netherlands, Spain, Singapore, Canada and Australia. The ITC also welcomed its first Indian member, Anshul Gupta in December. This diversity allows a truly worldwide perspective of the railway industry, enabling identification of best practices and principles for the global application and integration of train control and communication systems.

The ITC held four quarterly meetings this year, of which two were in-person, the first at the IRSE global office in London and the second during the IRSE Convention in Toronto which provided a fantastic opportunity for ITC members to ensure alignment with the overarching direction and strategic priorities of the IRSE. It gained a new perspective of current president Jane Power's theme of 'Power to the People' and her lecture series on 'Unsung Heroes' – the type of engineers who are not always highlighted but are the foot soldiers of the profession doing critical work to keep the railway running.

The ITC sadly lost a crucial member this year, Wim Coenraad, who passed away in July. Wim was an Honorary Fellow of the IRSE and member of the Netherlands Section. He made a significant contribution to the IRSE, and was a long-standing member of the ITC, having written numerous papers.



[irse.info/itc](https://irse.info/itc)

His loss will be greatly felt and our thoughts are with his family.

Papers published this year, include 'Satellite Navigation and Positioning Systems' 'Assurance of AI in Railway Safety Systems' and 'Cyber security and signalling'. There are many exciting papers in the pipeline, for example a study of the signalling implications of BIM, the data analytics of signalling, an investigation into the reduced capability and capacity of R&D in the industry, and the lessons learnt from the tragic Voorschoten accident. All ITC papers can be found on the IRSE website.

## Collaboration and global engagement

The IRSE continues to foster dynamic and productive relationships with engineering and railway organisations both in the UK and worldwide reinforcing the IRSE's truly international presence. Through direct engagement and its regional sections, the Institution has built strong connections with organisations in Australia, Canada, India, Singapore, Thailand, and Malaysia. This year, members of the presidential team and the chief executive have had the opportunity to meet with several of these international partners, strengthening these vital links.

These partnerships extend beyond rail industry companies to include other influential organisations, fostering mutual growth and impact. While IRSE already enjoys substantial support from industry players, we aim to expand this further for collective benefit.

We remain an active participant in the Rail Engineer Forum, which brings together representatives from key Professional Engineering Institutions (PEIs) with a vested interest in the rail sector. This group includes IMechE, IET,

ICE, PWI, CIRO, INCOSE, CILT, RCEA, and the Young Railway Professionals ([theref.org.uk](https://theref.org.uk)). The chair of this forum rotates annually, with John Easton from Birmingham University representing the IET this year. Additionally, our close collaboration with the Rail Industry Association UK (RIA) ensures stronger connections between professional employees and the wider rail industry enabling both bodies to identify and implement meaningful changes within the sector.

Our involvement with the Royal Academy of Engineering and Engineering UK plays a crucial role in inspiring young people to pursue careers in engineering disciplines.

The IRSE also maintains a close alliance with the UK's Engineering Council, ensuring the effective regulation of engineers. Encouragingly, we have observed a rise in members pursuing professional registration. As a licensed body of the Engineering Council, the IRSE has the authority to register Chartered Engineers, Incorporated Engineers, and Engineering Technicians.



[irse.info/collaboration](https://irse.info/collaboration)

The growing international interest in professional registration is a positive trend that underscores the Institution's expanding influence.

Diversity and inclusion remain high on our agenda. Led by junior vice president Harvinder Bhatia FIRSE, our Equality, Diversity, and Inclusivity (EDI) group is focused on attracting a broad spectrum of talent from diverse backgrounds and cultures, ensuring the rail industry becomes a more inclusive and welcoming environment for all.

Through these collaborative efforts, the IRSE continues to position itself as a leading force in the global rail engineering community, driving innovation, professionalism, and inclusivity forward.



# Annual General Meeting

The IRSE’s 110th Annual General Meeting, chaired by the retiring president, Steve Boshier FIRSE, was held at Transport for London, 5 Endeavour Square, London, UK, United Kingdom on 25 April 2024. During the meeting the link to those members attending by video conference was lost. Because of this the numbers attending fell below the level required for a quorum. This resulted in the meeting being adjourned and reconvened on Wednesday 15 May 2024 at the same location in accordance with the Memorandum and Articles of Association.

The Presidential Address was given at the first AGM and available to be viewed at [irse.info/p1thu](https://irse.info/p1thu)

Since Jane Power FIRSE had already been appointed as president, she chaired the reconvened meeting.

There was an overall attendance of 164 online and 19 in person.

In accordance with the Memorandum and Articles of Association all ordinary

business was concluded at this meeting, and it was resolved to appoint HPH Chartered Accountants for 2024.

A Special Resolution to authorise the Council of the IRSE to proceed to draft a petition for a Royal Charter and to produce such governance documents as necessary and present them to the Corporate Membership at a General Meeting in the future for final approval prior to formally petitioning was approved with 93.5% voting for and 6.5% voting against.

After conducting the formal business of the reconvened AGM, Jane presented the Annual Report for 2023 (published on 1 April 2024), and the treasurer, Andrew Smith FIRSE, commented on the Accounts for 2023.

The membership received copies of the Annual Report for 2023 (published on 1 April 2024), and there being no comments or questions received through correspondence this report was adopted.

Jane announced that the ballot for the election of members to Council had resulted in the following being elected:

Fellows: Martin Fenner (United Kingdom), Pierre-Damien Jourdan (Rest of the World, France) and Steve Allday (Australasia, Hong Kong, India, Netherlands).

Members: Jane Copperthwaite (Australasia, Hong Kong, India, Netherlands), Ben van Schijndel (Australasia, Hong Kong, India, Netherlands).

Associate Member. Mahesh Gadge (Australasia, Hong Kong, India, Netherlands).

Jane welcomed the new Council members and expressed grateful thanks to Peter Allen FIRSE, Firas Al-Tahan MIRSE, Georgina Hartwell MIRSE, Charles Page FIRSE and Andy Stringer FIRSE who retired from Council.

# IRSE Council

IRSE Council 2024–2025

IRSE ///

<b>President</b> Jane Power FIRSE	<b>From the class of Fellow</b> Stephen Allday FIRSE Ian J Allison FIRSE Michael Ewart FIRSE Martin Fenner FIRSE Pierre-Damien Jourdain FIRSE Yousef Kimiagar FIRSE Gordon Lam FIRSE Pete Gracey FIRSE Clive Roberts FIRSE	<b>From the class of Member</b> Andy (Roy) Brammer MIRSE Rob Cooke MIRSE Jane Copperthwaite MIRSE Jeet Dhelaria MIRSE Paul McSharry MIRSE Ben van Schijndel MIRSE	<b>From the class of Associate Member</b> Mahesh Gadge AMIRSE Keith Upton AMIRSE Xialou Rao MIRSE resigned and was replaced by Rae Faber AMIRSE
<b>Vice-presidents</b> Bogdan Godziejewski FIRSE Rod Muttram FIRSE Harvinder Bhatia FIRSE			
<b>Co-opted past-presidents</b> Steve Boshier FIRSE Andy Knight FIRSE Ian Bridges FIRSE	<b>Chief Executive</b> Blane Judd	<b>Treasurer</b> Andrew Smith FIRSE	

# Members' Lunch

The annual IRSE Members' Lunch, organised once again by past president Clive Kessell (pictured below, centre) took place at the Union Jack Club, Waterloo, London on 4 July.

The event gives members the opportunity to meet and network with colleagues from across the industry and also celebrate the success of those who recently won IRSE awards.

Award winners present at the lunch were Scott Cadzow (Signet Award), Byron De Lange (Dell Award), Rod Muttram (Merit Award), Jennifer Kirk (Thorowgood Award), and Colin Porter (Lifetime Achievement Award) (below right).



# Annual Dinner

The 58th Annual Dinner was held once again at The Grand Connaught Rooms in London on Thursday 9 May 2024. The dinner was attended by 278 members and guests. This represented a 25% decrease on last year.

We were again fortunate to retain the services of Paul Deacon as toastmaster. He has become a fixture of the event

since his first outing in 2015 with his light touch and wrangling of the crowd. The president introduced guest speaker Adam Riccoboni, CEO of Critical Future. He spoke extensively about artificial intelligence and its use in society. The Institution's support of international disaster recovery organisation RedR UK continues, and £855 was raised through

donations and commitments given on the night. The IRSE is grateful for the support and contributions from Kilborn Consulting, Signet Solutions, JMDR and Brightsea Print Group.

The 2025 event will be held on 8 May at the Sheraton Grand London Park Lane.





# Publications and communications

In keeping with this year's presidential theme of 'Unsung Heroes', we would like to pay particular thanks to the members, volunteers and staff of the IRSE and its partners who produce our diverse events, lectures, publications, video and online content, giving us so much to share with our community.

We share this wealth of information through many channels, online in print, and in person.

## IRSE News

We are extremely grateful to the hard work of all those involved in creating content for IRSE News, as well as to the dedicated team of reviewers and content editors who maintain the high standards of our flagship publication. Paul Darlington HonFIRSE, and production manager Mark Glover HonFIRSE have guided the publication through another excellent year, curating and presenting expert content for members.

Published monthly in both print and digital formats, IRSE News is the most downloaded item of content from the website and keeps our members up to date with its wide range of internationally sourced educational papers and articles.

## Proceedings

The Proceedings provide a summary of the Institution's activities and have been produced annually since the very first issue in 1913. A hard copy

of the Proceedings is supplied to the British Library and to the library of the Institution of Engineering and Technology. PDF versions of the Proceedings are available for all to read via our website.

## Website

With over 170k visits in the last year, the IRSE website remains the main point of contact for our members and other interested parties. From accessing the digital version of IRSE news to seeking out information on our programme of events, it is an essential communications tool. Under the surface, we have worked on new integrations to build better links between the website and our video content, as well as working to ensure that the immense volume of information online is kept up to date.

Member-only content and our events pages are top amongst our page views, but these are closely followed by access to our Licensing Scheme pages and other information which are integral to competency assessment and underline our commitment to keeping railways safe.

## E-bulletins

Our monthly email bulletin is sent to all members, containing information about upcoming events and other topical information. In addition, we send out ad-hoc electronic communications to members highlighting key presidential events and other important information.



[www.irse.org](http://www.irse.org)



[irse.info/irseneews](http://irse.info/irseneews)

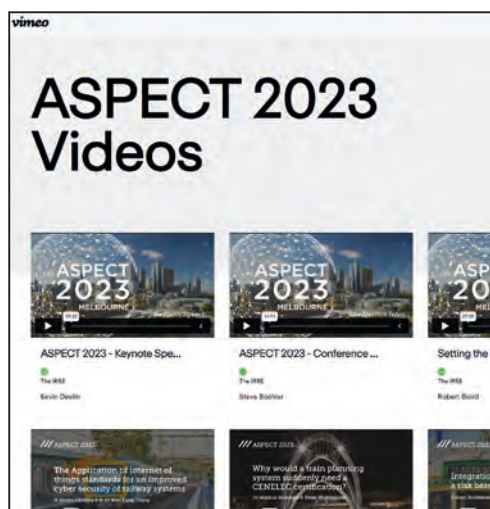
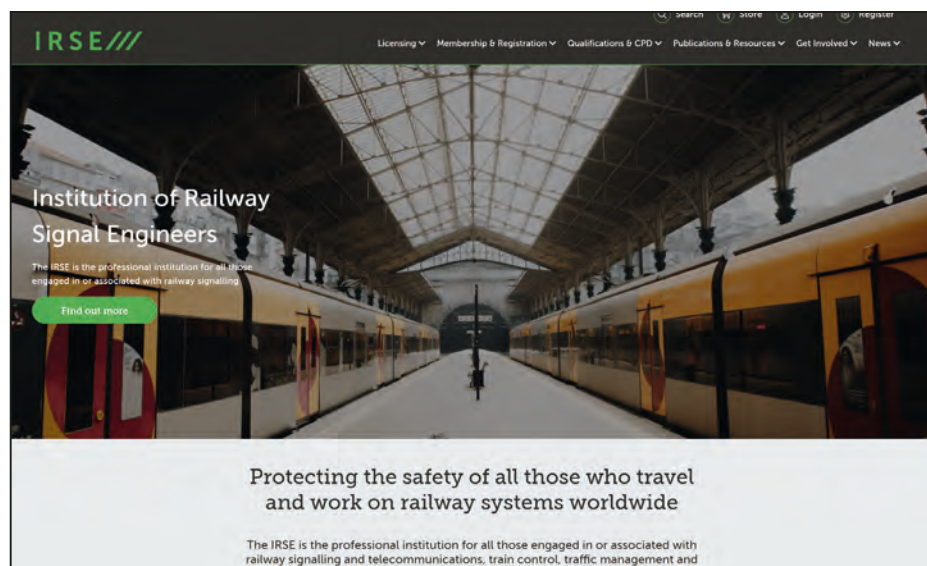


[irse.info/proceedings](http://irse.info/proceedings)

As the way email works continues to change, (not least because of the increasing use of AI Tools to sort and prioritise mail), we encourage all members to ensure that your regular IRSE bulletins are whitelisted by your mail software so as to ensure you always have the latest events and information from your Institution.



In 2024, our monthly publication, IRSE News, contained 476 pages of content relevant to our members, over 11 issues.



[irse.info/linkedin](https://irse.info/linkedin)



[irse.info/publications](https://irse.info/publications)



[irse.info/aivideo](https://irse.info/aivideo)



[irse.info/vimeo](https://irse.info/vimeo)

We share our work with our membership, and beyond, through a range of digital and print media.

## Video

The Institution's Vimeo channel ([irse.info/vimeo](https://irse.info/vimeo)) continues to grow with content added constantly by our local sections, younger members and programme of Presidential lectures. In addition, the platform hosts content from our major events, with content from ASPECT 2023 and the 2024 International Convention in Toronto being made available this year.

In total, our content has received over 18.6k views this year, with viewers in 50 countries watching over 5,250 hours of IRSE generated content. Our top titles this year included a 'Back to basics' review of telecoms, aimed principally at those taking the IRSE Professional Exam. Another popular item was a behind the scenes look at weekend system testing

on the TfL 4LM project, produced as part of Jane Power's 'Unsung heroes' series, in partnership with Hitachi Rail.

Vimeo is also the principal platform for the Institution's live and hybrid webinars and interactive content, providing both live and on-demand access to our rich programme for members in different time zones. ([irse.info/vimeo](https://irse.info/vimeo))

We also have a paid-for video platform through which we sell content, currently including videos from the AI seminar held this year. ([irse.info/aivideo](https://irse.info/aivideo)).

## Social media

The IRSE has seen its reach across social media increase over the year, gaining over 2200 new followers in 2024 and seeing an improvement in follower engagement and reposting.

Despite a mass exodus from the X (formerly Twitter) platform, our following is largely unchanged (down only four followers), but with a 20% increase in follower engagement.

The Institution continues to find its primary voice on LinkedIn, with a presence that has grown with a 21% increase in link clicks for our posted content. Engagement for the IRSE also sits at four times the platform average (8% vs 2%). Beginning February 2025, the Institution will also post on Bluesky as [irseglobal.bsky.social](https://irseglobal.bsky.social)

This platform is gaining mainstream support as an alternative to X.



# IT systems

The Institution's operations are supported by four key IT components: the Membership and Licensing Customer Relationship Management (CRM) system (Silverbear CRM), the website, the examination platform, and the office IT systems.

The upgrade of the CRM system was successfully implemented at the beginning of 2024, introducing some additional challenges that the global office team has managed commendably. While the system is now stable, several processes still require significant manual intervention. The website's membership portal enables members to access exclusive content, verify membership and licensing validity through real-time reports, and update personal and employment details. Additionally, the Institution's video content library on the IRSE Vimeo channel continues to expand.

Concerns remain regarding the usability of the website, particularly in relation to event booking. Given that the website serves as the front end for the CRM

system, this raises questions about the overall suitability of the current IT infrastructure.

During the 2023 Council Strategy Day in Melbourne, a specialist group was established to evaluate the IT tools utilised by the Global Office to meet the growing demand for online services. At the 2024 Strategy Day in Toronto, it was agreed that a thorough review of the CRM and web content management system was necessary to assess their continued viability. The cost implications of transitioning to an alternative solution are a key consideration, and a comprehensive audit is currently underway, leveraging external experts with experience supporting similar sized professional engineering institutions. The findings of this assessment will be reviewed in 2025.

The adoption of virtual meeting platforms has significantly enhanced membership engagement. Meetings are scheduled across various time zones to accommodate the Institution's international membership base.

The transition to an online examination platform has led to increased candidate participation. This platform is supplemented by two specialised software packages: a proctoring tool that monitors candidates' surroundings to detect unauthorised reference material, and an anti-plagiarism checker that ensures originality in submissions. These tools have proven effective in assisting volunteer examiners in maintaining the integrity of the examination process. Cases of misconduct have been addressed by the Council, resulting in disciplinary actions such as membership downgrades, temporary exam bans, or removals.

The ability of volunteers, members, and staff to adapt to the rapidly evolving IT landscape is creditable. Their dedication is instrumental in ensuring the Institution remains a relevant and forward-thinking professional body in the 21st century.

# Finances

The financial results are shown on pages 24 to 28. They are extracted from the consolidated accounts for the IRSE and its wholly owned trading subsidiary, IRSE Enterprises Limited. The term 'Group' at the top of a set of tables refers to the two companies combined, and 'Charity' to the IRSE alone. As far as possible, these extracted results use the titles and the format of the consolidated accounts.

This year, with the dropping out of the need to show references to the former investments with the UK Government's National Savings and Investments it has become possible to provide some explanation of the first line of the Consolidated Cash Flow Statement on page 24. To achieve this the former note 5 has been deleted and the former notes 3 and 4 reordered as notes 4 and 5 respectively. This allowed the introduction of a new note 3 which works back from the overall net income for the combined IRSE and IRSE Enterprises to the actual change in cash for the group.

In addition, it has been necessary to introduce a new note 9 and renumber the remaining notes.

It is encouraging, after several years of deficits for the combined IRSE and IRSE Enterprises, to be able to report that there was a small surplus in the Consolidated Statement of Financial Activities of £1,359 on financial activities before the change in investment values.

However, this is a consequence of a few one-off events during 2024, particularly receipt of an additional surplus transfer from the Australasian section following the ASPECT 2023 Conference.

(A significant transfer was made during 2023, but the final figure did not become clear until too late for it to be included in the 2023 accounts.)

In addition, the refund from the International Technical Seminar held in India in 2022 was finally received. As there had been no certainty this would be achieved, this became an unexpected windfall income for 2024. Sadly we cannot anticipate a similar series of beneficial receipts during 2025.

The advantageous changes in the stock markets also meant that the total funds of the charity, as represented in the Consolidated Balance Sheet, continued to increase.

This may prove useful as an increasing need has been identified to review the software systems the IRSE has available in order to better match the expectations of members in an increasingly on-line world. This activity is planned for early 2025 and it may be determined to be necessary to undertake some system updates to ensure the IRSE's staff can continue to serve members as efficiently as possible.

The only disappointing result is the reduction in value of the Restricted funds (Thorowgood and Dell), see the Consolidated Balance Sheet. Much of these funds was invested in UK Government Securities which reached the end of their term. They were cashed in and have now been transferred to our investment managers, Rathbones.



# Consolidated accounts (extract)

## THE INSTITUTION OF RAILWAY SIGNAL ENGINEERS CONSOLIDATED BALANCE SHEET AS AT 31st DECEMBER 2024

	Notes	Consolidated 2024 £	Consolidated 2023 £	Charity 2024 £	Charity 2023 £
<b>Fixed assets</b>					
Tangible fixed assets		63,681	55,582	32,706	28,750
Investments	1	2,093,585	1,982,152	1,521,399	1,452,725
<b>Total fixed assets</b>		<b>2,157,266</b>	<b>2,037,734</b>	<b>1,554,105</b>	<b>1,481,505</b>
<b>Current assets</b>					
Stocks	4	58,912	65,008	55,773	58,719
Debtors	5	237,484	241,062	392,774	347,626
Cash at bank and in hand		556,481	481,918	124,804	232,415
<b>Total current assets</b>		<b>852,877</b>	<b>787,988</b>	<b>573,351</b>	<b>638,760</b>
<b>Creditors: amounts falling due within one year</b>	6	<b>(608,188)</b>	<b>(587,964)</b>	<b>(340,628)</b>	<b>355,464</b>
<b>Net current assets</b>		<b>244,689</b>	<b>200,024</b>	<b>232,723</b>	<b>283,296</b>
<b>Total assets less current liabilities</b>		<b>2,401,955</b>	<b>2,237,758</b>	<b>1,786,828</b>	<b>1,764,801</b>
<b>Creditors: amount falling due after more than one year</b>	7	<b>(406,707)</b>	<b>(332,634)</b>	<b>-</b>	<b>-</b>
<b>Total net assets</b>		<b>1,995,248</b>	<b>1,905,124</b>	<b>1,786,828</b>	<b>1,764,801</b>
<b>Funds of the Charity</b>	2				
Unrestricted funds		1,957,819	1,865,074	1,749,399	1,724,751
Restricted funds		37,429	40,050	37,429	40,050
<b>Total charity funds</b>		<b>1,995,248</b>	<b>1,905,124</b>	<b>1,786,828</b>	<b>1,764,801</b>

## THE INSTITUTION OF RAILWAY SIGNAL ENGINEERS CONSOLIDATED CASH FLOW STATEMENT AS AT 31st DECEMBER 2024

	Notes	2024 £	2023 £
Net cash (provided by) operating activities	3	91,690	254,365
Cash flow from investing activities:			
Purchase of tangible fixed assets		(44,989)	(15,660)
Purchase of fixed asset investments		(229,895)	(465,653)
Sale of fixed asset investments		207,227	392,595
Interest received		1,002	919
Dividends received		49,528	43,168
<b>Net cash provided by / (used in) investing activities</b>		<b>(17,127)</b>	<b>(44,631)</b>
<b>Change in cash and cash equivalents in the year</b>		<b>74,563</b>	<b>209,734</b>
<b>Cash and cash equivalents at start of year</b>		<b>481,918</b>	<b>272,184</b>
<b>Cash and cash equivalents at end of year</b>		<b>556,481</b>	<b>481,918</b>

**THE INSTITUTION OF RAILWAY SIGNAL ENGINEERS**  
**CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES AND INCOME AND EXPENDITURE**  
**ACCOUNT FOR THE YEAR ENDED 31st DECEMBER 2024**

	Notes	Unrestricted £	Restricted £	Total 2024 £	Total 2023 £
<b>Income and Endowments from:</b>					
Charitable activities:					
Donations and legacies	10	175	-	175	6,192
Other trading activities:					
Non-ancillary trading income	11	666,084	-	666,084	517,027
Other activities	11	729,376	-	729,376	682,995
Investments:					
Investment income	12	49,663	867	50,530	44,087
<b>Total Income</b>		<b>1,445,298</b>	<b>867</b>	<b>1,446,165</b>	<b>1,250,301</b>
<b>Expenditure on:</b>					
Raising funds	13				
Other activities		8,457	-	8,457	8,519
Investment		11,844	-	11,844	9,003
Non-ancillary trading		654,589	-	654,589	501,398
		674,890	-	674,890	518,920
Charitable activities	13				
Awards		52,098	447	52,545	43,632
Promoting best practice		717,371	-	717,371	703,102
		769,469	447	769,916	746,102
<b>Total Expenditure</b>		<b>1,444,359</b>	<b>447</b>	<b>1,444,806</b>	<b>1,265,654</b>
<b>Net Expenditure before (loss) / gain in investments</b>		<b>939</b>	<b>420</b>	<b>1,359</b>	<b>(15,353)</b>
<b>Net (loss) / gain on investments</b>	1	<b>91,806</b>	<b>(3,041)</b>	<b>88,765</b>	<b>105,561</b>
<b>Net Income / (Expenditure)</b>		<b>92,745</b>	<b>(2,621)</b>	<b>90,124</b>	<b>90,298</b>
<b>Reconciliation of funds</b>					
<b>Total funds brought forward</b>		<b>1,865,074</b>	<b>40,050</b>	<b>1,905,124</b>	<b>1,814,826</b>
<b>Total funds carried forward</b>		<b>1,957,819</b>	<b>37,429</b>	<b>1,995,248</b>	<b>1,905,124</b>

**ANNUAL MEMBERS' REPORT WITH SUPPLEMENTARY MATERIAL**

The tables set out on pages 16 to 20 are extracted from the full audited accounts of the Institution for the year ended 31 December 2024. They constitute supplementary material to this Annual Members' Report. Section 426A of the Companies Act 2006 requires the following statements to be made in respect of the supplementary material:

1. This annual report is only part of the company's annual accounts and reports prepared under the Companies Act.
2. A full copy of the company's annual accounts and reports may be obtained upon request from The Institution of Railway Signal Engineers, 5th Floor, 1 Birdcage Walk, Westminster, London SW1H 9JJ, UK.
3. The auditor's report on the annual accounts was unqualified.
4. The auditor's statement under section 496 of the Companies Act (whether the Trustees' Report is consistent with the accounts) was unqualified.

**A P Smith**  
Treasurer

Approved by the Trustees on 20 March 2025.

**JE Power**  
President  
Director and Trustee

**B Godziejewski**  
Vice-President  
Director and Trustee

**THE INSTITUTION OF RAILWAY SIGNAL ENGINEERS**  
**NOTES TO THE CONSOLIDATED ACCOUNTS**  
**FOR THE YEAR ENDED 31<sup>st</sup> DECEMBER 2024**

**1 Fixed Asset Investments (Group)**

	Equities £	Government Securities £	Total £
Market value			
At 1 January 2024	1,799,150	188,002	1,982,152
Additions	124,447	105,448	229,895
Disposals	(100,753)	(106,474)	(207,227)
Revaluations	91,744	(2,979)	88,765
At 31 December 2024	1,914,588	178,997	2,093,585

**2 Movement in Funds (Group)**

	At 1.1.24 £	Net movement in funds £	At 31.12.24 £
<u>Designated funds</u>			
Scholarship Fund	80,112	(43)	80,069
Alan Fisher / Frank Hewlett Fund	435,002	(5,311)	429,691
General Fund - Unrestricted fund	1,133,129	30,002	1,163,131
IRSE Enterprises - Non-charitable trading fund	216,831	68,097	284,928
	1,865,074	92,745	1,957,819
<u>Restricted funds</u>			
Dell Bequest	25,700	(2,262)	23,438
Thorrowgood Bequest	14,350	(359)	13,991
<b>TOTAL FUNDS</b>	<b>40,050</b>	<b>(2,621)</b>	<b>37,429</b>

The company holds 20% or more of the issued share capital of the following company:

<u>Company</u>	<u>Country of incorporation</u>	<u>Share class</u>	<u>%age owned</u>
IRSE Enterprises Limited	England and Wales	Ordinary	100

	<u>Share capital and reserves</u>	<u>Profit for year</u>
IRSE Enterprises Limited	212,835	68,097

**3 Reconcile Net Income to Net Cash Flow - Operating Activities**

	2024 £	2023 £
Net income for the reporting period - notes 8, 9, 10, 11, 12, 14	90,124	90,298
Depreciation of tangible Fixed Assets	36,890	7,050
Gains on investments	(88,765)	(105,651)
Interest and Dividends received	(50,530)	(44,087)
Decrease in Stocks and Debtors	(9,674)	(48,599)
Decrease in Current Asset Investments	-	211,198
Increase in Creditors	94,297	144,156
Net cash provided by operating activities	91,690	254,365

**4 Stock**

	Consolidated 2024 £	Consolidated 2023 £	Charity 2024 £	Charity 2023 £
Stock	58,912	65,008	55,773	58,719

**5 Debtors**

Trade debtors	107,855	124,987	-	-
Other debtors	3,403	3,656	3,403	3,656
Pre-payments and accrued income	22,457	25,466	13,917	180
VAT	103,769	86,953	103,769	86,953
Amounts owed by group undertakings	-	-	271,685	256,837
	237,484	241,062	392,774	347,626

**6 Creditors: fall due within one year**

Trade creditors	31,141	60,135	25,463	47,943
Accruals	19,327	22,416	13,488	18,074
Taxation and social security	7,458	5,255	-	-
Deferred income	531,419	475,553	283,079	266,761
Other creditors	18,833	24,605	18,598	22,686
	608,188	587,964	340,628	355,464



7	Creditors: amounts falling due after one year	Consolidated 2024 £	Consolidated 2023 £	Charity 2024 £	Charity 2023 £
	Other creditors	332,634	332,634	-	-

Representing the proportion of licence fees receive which will be credited to Income after more than one year.

8	Activities of IRSE Enterprises	2024 £	2023 £
	<u>Turnover</u>		
	Donations	431	53
	Proceeds - Conventions and Conferences	180,947	57,000
	Proceeds - Dinners	57,188	63,775
	Proceeds - Technical visits and Seminars	10,407	39,477
	Licensing - Licence fees received	265,062	240,062
	Licensing - Appraisal fees	10,108	3,447
	Licensing - Assessing agents fees	129,707	99,121
	Licensing - Technical publications	12,234	14,092
		666,084	517,027
	<u>Cost of sales</u>		
	Costs - Conventions and Conferences	119,870	7,650
	Costs - Dinners	37,102	47,675
	Costs - Technical visits and Seminars	10,803	31,250
	Costs - Young members' Seminars and Visits	-	-
	Licensing - Logbooks opening stock	6,289	10,732
	Licensing - Engineer's fees	9,790	15,758
	Licensing - IRSE administration charges	305,650	253,257
	Licensing - Audit engineers	57,521	46,014
	Licensing - Accreditation	8,473	6,284
	Licensing - Logbooks closing stock	(3,139)	(6,289)
		552,359	412,331
	Gross profit	113,725	104,696
	<u>Other income</u>		
	Dividends receivable	8,435	7,936
	Bank interest receivable	1,789	265
		10,224	8,201
			112,897
	<u>Expenditure</u>		
	IRSE Admin charges	28,496	24,514
	Telephone	7,358	7,722
	Post and stationery	3,099	5,840
	Accommodation and refreshments	3,576	4,818
	Computer costs	5,512	12,208
	Professional indemnity insurance	4,328	3,741
	Licensing - Treasurer's, Chief Executive's and Registrar's Fees	28,018	29,610
	Licensing Continuous Improvement	1,185	-
	Logbook purchases	1,319	-
	Investment Manager's fees	3,952	3,724
	Auditor's remuneration	4,740	2,250
	Donations	-	60,000
	Exchange rate variance	7,020	(7,678)
		98,603	146,749
	<u>Finance costs</u>		
	Licensing - Bank charges	3,627	2,318
	Net figure	21,719	(36,170)
	<u>Gain / Loss on revaluation of assets</u>		
	Gain on revaluation of investments	46,378	44,423
	Net profit	68,097	8,253

<b>9</b>	<b>Fixed Asset Investments - Charity</b>				<b>Govt. Securities</b>	<b>Equities</b>	<b>Total</b>
	Revaluation during 2024				£ (1,861)	£ 44,248	£ 42,387
<b>10</b>	<b>Donations and Legacies (Group)</b>					<b>2024</b>	<b>2023</b>
						£	£
	Donations					175	6,192
<b>11</b>	<b>Other Trading Activities (Group)</b>						
	Subscriptions					596,335	547,349
	Professional reviews					6,945	7,095
	Advertising					36,180	33,525
	Booklets and text books					10,099	20,847
	IRSE ties, badges & cufflinks					-	-
	Examination fees and materials					77,313	71,368
	Proceeds from members' lunch					2,504	2,811
	IRSE Income					729,376	682,995
	Trading income: Turnover of trading subsidiary - Note 8					666,084	517,027
<b>12</b>	<b>Investment Income (Group)</b>						
	Equities and government stocks					39,304	34,967
	Interest receivable					1,002	919
	Charity total					40,306	35,886
	IRSE Enterprises Ltd					10,224	8,201
	Group total					50,530	44,087
<b>13</b>	<b>Analysis of Expenditure</b>	<b>Staff Costs</b>	<b>Other</b>	<b>Depreciation</b>		<b>2024</b>	<b>2023</b>
		£	£	£		£	£
	Raising funds						
	Other activities	2,964	5,315	178		8,457	8,519
	Investment	-	11,844	-		11,844	9,003
	Non-ancillary trading	247,676	387,804	19,109		654,589	501,398
	Total raising funds	250,640	404,963	19,287		674,890	518,920
	Charitable activities						
	Awards	11,858	39,976	711		52,545	43,632
	Technical Department	37,665	20,729	2,259		60,653	-
	Promoting best practice	243,957	398,128	14,633		656,718	703,102
	Total charitable activities	293,480	458,833	17,603		769,916	746,714
	Total expenditure	544,120	863,796	36,890		1,444,806	1,265,654
<b>14</b>	<b>IRSE Charitable Expenditure</b>					<b>2024</b>	<b>2023</b>
						£	£
	Raising donations and legacies						
	Fund raising dinners					2,274	2,625
	Charitable activities						
	Proceeding: editing and printing					7,314	4,684
	Newsletter: editing and printing					105,939	120,340
	Booklets and textbooks					5,066	5,808
	IRSE ties, cufflinks and badges					118	105
	Prizes					2,022	32
	Awards					27,812	20,058
	Activities funded by country subscription supplements					8,361	11,254
	Professional review costs					1,035	1,000
	Thorowgood medals					97	-
	Support costs						
	Staff costs					296,444	263,597
	Office rent and services					18,258	18,626
	Fees and honoraria					85,485	87,935
	Membership database					-	1,039
	Other administrative costs					195,487	210,814
	Investment manager's fees					11,844	9,003
	Fixtures and fittings					17,781	2,336
	Governance costs						
	Auditor's remuneration					4,880	5,000
	Total expenditure					790,217	764,256