In the last ePreview I mentioned that I had met the new INCOSE Executive Director, Steve Records, at the EMEA WSEC. During which, I was able to apprise him of INCOSE UK’s goals and aspirations and our relationship with INCOSE.

On 7th July the Immediate Past President, Ian Gibson, the President Elect, Andrew Pemberton, our Head of Secretariat, Emma Jane Taylor, and I spent a day with Steve to discuss a range of mutually important topics in depth. As he has only been in his position for a couple of months, Steve is still familiarising himself with how INCOSE works, particularly the relationships between INCOSE Central and the Chapters, especially the international MoA Chapters.

Steve expressed his desire for greater cooperation between the chapters and simplifying the arrangements between them and INCOSE Central. However, he is becoming increasingly aware that adopting a “one size fits all” model for INCOSE would be challenging. He acknowledged that some international chapters have local arrangements with other governance bodies, such as our relationship with the Engineering Council and SESA’s association with Engineers Australia. While we agreed with him that closer working between the Chapters and INCOSE Central would be beneficial, we acknowledged that it might not be a straightforward process.

We briefed Steve on our relationship with the Engineering Council and our plans to transition to IfSE. We discussed why it is crucial for INCOSE UK to be recognised as the Professional Engineering Institute for Systems Engineering in the UK. Therefore, changing our name to something aligned with other PEIs seemed the right decision, without altering our relationship with INCOSE. In fact, we believed that the name change would be beneficial to both INCOSE UK and INCOSE, potentially leading to increased membership, similar to when we began offering Professional Registration and became a PEI. While Steve expressed some concerns about losing the name “INCOSE UK” as he aims to strengthen the INCOSE brand globally, we are confident that we can find the right balance by working together.

We were pleased with Steve’s openness and willingness to address some of the difficulties we have encountered with INCOSE. We discussed how INCOSE can appear to be US-centric and overlook the differences among the international Chapters. The fact that the MoA Chapters are separate legal entities from INCOSE adds complexity to the relationships, which is occasionally overlooked. We highlighted a few instances where communication breakdowns and distrust had occurred. For instance, we discussed the reasons behind our hesitance to publish UK-developed publications through INCOSE. Steve acknowledged that mistakes had been made and expressed a genuine desire to better understand why and how they had happened.

Finance was another topic of discussion, particularly our thoughts on the fee retention model. Steve was keen on understanding our income and expense, as he wants the Chapters to thrive. He recognised that running and administering a Chapter with 1300 members requires significant resources. We explained our major sources of income: UKAB, ASEC, and increasingly, Publications. We also explained our intention to evolve our financial model to enhance resilience and explore initiatives that would further benefit to members. Steve offered alternative suggestions regarding financial arrangements between INCOSE Central and the Chapters, which we believe are worth considering.

Finally, we discussed the current intention for IS 2024 and IW 2025 to be in Europe. We expressed our willingness to support both events whilst ensuring that ASEC 2024, our 30th Anniversary event, remains a focal point.

In conclusion we had an excellent discussion and greatly appreciated Steve’s candour and openness. Although he is still on a steep learning curve, he is already making strides in improving relationships across the organisation. We look forward to working with him!

We anticipate that Steve will be attending ASEC 2023, providing an opportunity for many of you to engage with him.
We appear to have reached the end of the surprisingly long and circuitous review cycle with the Engineering Council, involving both the Privy Council & Governance Panel (PCGP), and also the Quality Assurance Committee (QAC). The PCGP are now content with the proposed Articles of Association for IfSE, having given a great deal of scrutiny to the proposed member classes and postnominals to ensure that they align to their expectations for a licenced professional engineering institute running as a professional association (rather than a learned society). The QAC have determined that they see no obstacle to granting a PEI licence to IfSE, which would effectively be a continuation of the current INCOSE UK licence as the two organisations will be treated as having merged.

All that remains is the final summing up paperwork to be approved, and then we are good to go with sending out a special resolution for an extraordinary general meeting. Our hope is to hold a physical meeting in the Autumn, with proxy voting enabled for at least 28 days before the meeting. It’s been a long journey, with many a slip along the way, and often for unanticipated reasons, but it feels like we are finally about to emerge from the tunnel.

Once we are able to go firm on a date, we will send out further information on the proposed changes, the voting process, and the special resolution itself. This will be done outside of the usual pattern of ePreview publications.

Written by Ian Gibson, INCOSE UK Past President and Chair of the IfSE Taskforce

Once the review process is completed, we will inform all candidates of the Council’s decision. Those successfully nominated and standing for election will be announced on the Election page of the INCOSE UK website and featured in ePreview.

Voting will take place on the 12th of October 2023 until the 9th of November 2023. Once voting has closed, the Candidates will then be informed of the results prior to them being announced in the AGM on the 22nd November 2023.

This is the first year using our new process, where candidates need to engage with the newly formed Nominations and Appointments Committee (NAC) prior to moving forward for Council approval to go onto the ballot. The NAC has now formed, with appropriate safeguards in place regarding personal information and conflicts of interest, and will be getting in touch with the candidates shortly. The aim of this process is to both prepare potential new Council members for the shock and surprise that can come with taking on a post, and also to ensure that incumbents are standing again for the right reasons. In the longer term, the NAC is also keen to engage with anyone who is considering standing in next year’s elections, as what we ultimately want is a strong and diverse set of candidates and potential future leaders.

Written by Ian Gibson, INCOSE UK Past President and Chair of the Nominations and Elections Committee

Nominations have now closed for the role of Professional Development Director of INCOSE UK. The Secretariat along with the Nominations and Appointment Committee is reviewing all the submissions.

Written by Ian Gibson, INCOSE UK Past President and Chair of the IfSE Taskforce

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**Election Timeline**

- **Nominations Open**: 3rd Jul 23
- **Voting Opens**: 12th Oct 23
- **Voting Closes**: 9th Nov 23
- **Results Announced at AGM**: 22nd Nov 23
Booking is open for ASEC 2023!

INCOSE UK are pleased to announce that booking for the Annual Systems Engineering Conference 2023 is open!

Now in its 14th year, ASEC is the UK’s flagship Systems Engineering conference, attracting a wide range of industry, academic, and government professionals. This year’s ASEC is being held in Liverpool at Spaces at The Spine, a world-class, dynamic events venue.

Why attend ASEC?

**Networking Opportunities**
ASEC provides a great platform for professionals to engage and connect with like-minded individuals, fostering collaborations and opportunities for professional growth.

**Stay Ahead of the Curve**
Attending ASEC helps you to stay up to date with the latest research, developments, and emerging technologies that are shaping the future of Systems Engineering.

**Knowledge Sharing**
ASEC features presentations, tutorials and panel discussions by industry experts that offer valuable insights into System Engineering.

**Professional Development**
By attending ASEC, participants can enhance their skills and knowledge through tutorials and stay updated with evolving practices and methodologies.

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![Annual Systems Engineering Conference 2023](image-url)
We are pleased to announce Dr. Nike Folayan MBE as the keynote speaker for the M’Pherson Lecture on Day One of ASEC 2023.

Dr Nike Folayan MBE is a highly accomplished Chartered Electronics Engineer with a doctorate in Electronics engineering. Currently, she holds the position of Technical Director and Technical Discipline Leader for Communications and Control at WSP, an engineering consultancy. In this role, Nike leads a team of telecommunications engineers on a variety of projects within the transport industry, including railways and the highways, in the UK, Australia, Middle East and Africa.

Alongside her role at WSP, Nike actively contributes to organisations promoting diversity in engineering. She chairs AFBE-UK (Association for BME Engineers), a non-profit organisation that promotes higher achievement in Engineering and Education amongst people of Black and Ethnic minority backgrounds in the UK. Additionally, she serves as a Trustee at EngineeringUK and StemetteFutures. Nike is also a Fellow at the Institution of Engineering and Technology and an Honorary Fellow at the Royal Academy of Engineering. She holds positions on the Engineering Industrial Panel at the University of Kent and the Mayor’s Infrastructure Advisory Panel.

Nike’s previous involvements include serving as a Trustee at the Engineering Development Trust (EDT), participating in diversity panels for the Science Council and the Royal Academy of Engineering, and contributing to the Transport for London Diversity Steering group and Strategic Planning Committee of the University of the West of England. She has also served as a board member for The Hamilton Commission, an initiative started by Sir Lewis Hamilton to address the underrepresentation of Black people in UK motorsport and the STEM sector. Recognising her exceptional contributions to the field, Nike has been awarded of two honorary doctorates in Science and Technology from University of Kent and UWE Bristol.

We look forward to welcoming Dr. Nike Folayan to ASEC 2023, where she will undoubtedly inspire attendees with her wealth of expertise.
ASEC 2023 Sponsorship

ASEC 2023 offers opportunities to promote your business to the delegates and exhibitors. Our events attract senior systems engineers from a broad range of industries, many of whom help to shape investment decisions within their organisations. Sponsoring ASEC is a great way to raise your company’s profile.

The full description of the opportunities can be found online in the Sponsorship Opportunities document.

Registration - £1,235 (+VAT)

There is an opportunity to sponsor the registration desk, which every delegate will be visiting in order to register for the day.

Sponsorship of the registration desk offers the following benefits:

- Company sign, supplied by you, displayed at the registration desk (size and type of sign to be determined by the INCOSE UK Events Team).
- Sponsors will also have the option to put corporate flyers on the ASEC ‘promotional table’ or submit a PowerPoint slide for the ASEC Exhibitors, Sponsors and UKAB company PowerPoint (16:9) which will be displayed on a screen in the exhibitor area.
- Corporate logo on the event website.

The deadline for this opportunity is Friday 22nd September 2023

Exhibiting at ASEC 2023

Displaying your company’s products and services at an exhibition stand at ASEC is a great way to reach a targeted audience, showcase expertise, and make valuable connections.

The full description of the exhibitor opportunities can be found online in the Exhibitor Opportunities document.

ASEC 2023 Confirmed Exhibitors

If you would like to secure a sponsorship opportunity or exhibit at ASEC 2023 please email the events team at events@incoseuk.org. Early booking is recommended.

Upon receipt of a request to sponsor at ASEC 2023, we will issue the contract and terms and conditions.
The UK-SPEC (4th Edition) offers valuable guidance to INCOSE UK members seeking professional registration. It provides a framework aligned with the required standards for Engineering Technicians (EngTech), Incorporated Engineers (IEng), and Chartered Engineers (CEng). By referring to the UK-SPEC, members can assess their competencies, identify areas for development and create a personal development plan. In summary, the UK-SPEC is a valuable resource for INCOSE UK members, aiding them in navigating the registration process and enhancing their professional status in Systems Engineering.

The Engineering Council's Recognised Course Search and Recognised Older Course Search are valuable resources that can assist INCOSE UK members in their journey towards professional registration. These searchable databases allow members to verify if a specific qualification has been approved or accredited to meet the educational requirements for their desired category of Professional Registration. By utilising the course search, members can ensure that their chosen courses align with the recognised standards set by the Engineering Council, increasing their chances of meeting the necessary educational criteria. The course search provides a reliable and easily accessible way for INCOSE UK members to verify the accreditation status of courses and qualifications, supporting them in their pursuit of professional recognition and facilitating their path to becoming professionally registered.

The Professional Registration Document provided by the Engineering Council is an invaluable resource for INCOSE UK members seeking professional registration. It covers essential aspects such as what professional registration entails, detailed information about the registration titles available, the benefits of attaining professional registration, real-world case studies, the application process, and the subsequent steps to follow. This document serves as a comprehensive guide of Professional Registration, offering valuable guidance and insights into the professional registration journey. By referring to this document, INCOSE UK members gain a clear understanding of the requirements, expectations, and advantages of professional registration. It can provide members with the necessary knowledge and guidance needed to navigate the registration process successfully, helping them enhance their credibility, career prospects, and recognition within the field of Systems Engineering.
We would like to congratulate the following members who have recently attained CEng, IEng and EngTech. Members listed have given their consent to be published.

Professional Registration Advisors (PRAs) are professionally registered volunteers, with detailed knowledge of the professional registration requirements laid out in the UK-SPEC, who give their time to support potential registrants in making a formal application for CEng, IEng or EngTech. As an INCOSE UK PRA, you will give specialist advice to new Applicants in preparing their application, and where necessary, support Applicants who have been asked to submit further information in drafting their application for resubmission.

All Professional Registration Advisors are given full training and support is ongoing. The amount of time required for this volunteer activity is flexible and our PRAs are able to accept or decline allocations depending on their availability. More and more members are looking to apply for Professional Registration with INCOSE UK, so if you are looking to support others gain Professional Registration, as well as further your own career development and CPD, this could be a perfect role for you.

Our next training session for Professional Registration Advisors is arranged for 4th September 2023 from 1200 -1400 hours. If you are interested in the role, please contact the Professional Development team on profdev@incoseuk.org
Professional Registration Advisor Interview with Alan Harding

Alan Harding is both a Professional Registration Advisor and Assessor for INCOSE UK. Read more about his experience of volunteering for these roles:

How long have you supported INCOSE UK applicants for professional registration as a PRA?

Since 2012 when INCOSE UK introduced professional registration, with increased involvement after becoming a Professional Education Institution.

Did you receive training?

Yes, I underwent initial training for professional registration and have since received regular refreshers and updates.

What do you enjoy most about being a PRA?

I gain valuable insights from each person I meet, learning about their application of Systems Engineering, their business domain, and their perspectives on engineering in today’s society.

What benefits do you derive from being a PRA?

It enhances my mentoring and advising skills for colleagues seeking professional registration. It also provides regular practice in interviewing and making well-informed decisions while maintaining registration standards.

Any advice for those considering involvement?

It’s a rewarding opportunity to contribute to INCOSE UK and the Systems Engineering community, so I encourage you to seize this chance to give back.

Systems engineering can make you a better engineer

Systems engineering takes the guesswork out of development, offering a family of scalable practices that work together as a system to yield consistent development success across a wide variety of markets and complexity levels.

PPI’s 5-Day Systems Engineering course has helped thousands of engineers discover the compelling design logic behind the terms, enabling them to enhance security, improve reliability, optimize designs, and ultimately engineer better systems.

INVEST IN YOURSELF

ppi-int.com
If you are considering submitting a CSEP application, here a few hints and tips to help your application reach its best potential from the Professional Development team. We’d like to point out that we can’t comment on the technical content of an application, but we do see every application that comes in so we have a pretty good idea on the administrative side of what will help you and what might hinder!

Firstly, pick the right CSEP application on the website on the ‘Start the Process’ page…

If you have already achieved your ASEP certification, you need to choose the ‘ASEP to CSEP’ upgrade option.

If you have not achieved ASEP, then you need to complete a full CSEP application and choose the ‘CSEP’ option.

Missing information...

Please try to avoid blank boxes! Filling in all the required boxes to the best of your knowledge is the best way to approach the application.

Are you upgrading from ASEP to CSEP?

Make sure you add your ASEP Certification Number, Date Attained and Expiration Date if known, this information will be on your certificate. If you have mislaid that, then please email profdev@incoseuk.org who will be happy to provide you the information.

Don’t forget to add your degree certificate, if you have one...

This ensures we can confirm you have provided the correct amount of years’ experience against your education. You can add more than one certificate.

How much should I write?

The rule of thumb is to write approximately one sentence for every 1 month’s experience. Sometimes this will be less, sometimes this will be more.

Try and be succinct however…. Nobody wants to read War and Peace!

How should I demonstrate my experience?

We would recommend against listing your experience as a set of short bullet points. Listing your experience like a job description does not give sufficient detail as the review team want to see how you demonstrate your experience.

A well laid out narrative is preferable. A recommendation you may wish to follow is to use the STAR method to demonstrate your experience.

Choose your references carefully!

There are a few reasons why choosing your references is important:

The review team rely heavily on the referees’ submissions to validate the experience you have claimed, so choose people who you can rely on to take the time to support your claims in writing.

Your referees need to complete their reference in good time for you. You don’t want your application delayed by a tardy referee.

Your references need to be familiar with the work you are claiming for and match the dates in your application.

If the admin team need to get further information from the referee, they need to be responsive to time deadlines.
CSEP Application Guidance

How many references should I have?

You need to have a minimum of three references supporting your CSEP application.

In what order should I list my experience?

You must list your work experience in chronological order, with the most current role first, up to the current month.

If there are time periods where you are not claiming experience for whatever reason, this is not a problem. However, please state why you are not claiming for that time period so that the review team understand the reasons.

Matching your references to positions...

Make sure you write in the name of the Reference covering a particular position in the ‘Reference(s) that will cover this position:’ box. If you have multiple references, list all the names covering that position.

Double check your reference information!

You will need to include your contact details for your references in the Reference information boxes.

You must state which position that particular reference is covering. This may be more than one position.

Please add the working relationship between you and your referee in.

Summary table

Make sure that you have claimed at least 12 months experience in at least three of the technical areas. The rest of your experience can be spread out among the technical areas.

A minimum of 60 months experience in total must be claimed for those with a Technical Degree. If you do not have a Technical Degree, please refer to our ‘CSEP Guidance’, where you can find a link to our Certification FAQ page for further information.

CSEP Competition Winner

Thank you to all that entered the CSEP competition.

We would like to congratulate Lee Knight for winning the ‘What does being a CSEP mean to you?’ competition.

Lee’s entry (below) showcased his personal take on what being a CSEP means to him, by using a Functional Flow Block Diagram that shows the inputs, outputs and activities that contribute to being a CSEP.

Your CSEP gilet is on its way to you Lee!

Keep an eye out for further competitions on our Twitter and LinkedIn pages.
The Fifth Edition of the Systems Engineering Handbook (SEHSE) was published in July 2023. INCOSE UK members can get a 55% discount on the hard-copy when purchased through Wiley.

INCOSE formed a diverse editorial team with deep Systems Engineering knowledge to develop the SEHSE handbook. Over 700 stakeholders provided user needs, resulting in a first draft reviewed by 250 individuals generating 1200 comments. The editors and authors iteratively addressed the comments, incorporating diverse perspectives, industry needs, and promoting knowledge sharing and consensus building.

To ensure this update to SEHSE brings substantial enhancements to the handbook, the following changes have been made:

- The handbook has been restructured into six parts, providing better organisation and consolidation of content compared to the previous version’s ten chapters.
- A single-column format has been adopted in the SEHSE, enhancing readability and making it more accessible to users.
- There is an increased emphasis on foundational concepts, offering readers comprehensive overviews and perspectives.
- The SEHSE aligns with the latest version of ISO/IEC/IEEE 15288:2023, incorporating its processes and reordering them accordingly.
- IPO diagrams have been improved to focus on modelling and information-centric approaches.
- Stakeholder input has been considered, resulting in the inclusion of new topics such as Uncertainty, Cognitive Bias, Brownfield, COTS, IoT/Big Data, Cyber-Physical Systems (CPS), Natural Systems, and Digital Engineering.
- The handbook provides expanded coverage of SE practices, including competencies/soft skills and their relationship to other domains.
- Visual enhancements have been made throughout the handbook through collaboration with a graphic designer, ensuring impactful figures and visuals.
- Domain-specific applications have been added, and provisions have been made for future domain annexes.

These updates aim to ensure that the SEHSE remains a comprehensive and valuable resource for Systems Engineering practitioners, incorporating emerging topics and improving usability.

Update by:

David Walden
Bernardo Delicado
The INCOSE Handbook 5th Edition is now published

Discount for INCOSE UK members

INCOSE UK members are eligible for a 55% discount on the hard copy of the 5th edition of the Systems Engineering Handbook when purchased through Wiley. Please email profdev@incoseuk.org to receive your exclusive discount code.

Alternatively, members of INCOSE UK can download a free soft copy of the SEH5E through INCOSE using this link. Please email profdev@incoseuk.org if you encounter any issues while downloading the book.

Impact on the Certification exam

For more information on how the release of the 5th edition of the Systems Engineering Handbook affects the Certification exam, we recommend watching this video posted by INCOSE.

Order your copy of the SEH5E!

INCOSE Members get a 55% discount on the paperback copy.

Visit incose.org/sehandbook

If you are having any issues ordering the book please contact profdev@incoseuk.org
We would like to congratulate the following members who have recently attained ASEP certification. Members listed have given their consent to be published.

Case Study Karl Garrett

Karl started his career as an apprentice machinist and has since worked across a number of disciplines and sectors within engineering. For the last decade, he has dedicated his career to Systems Engineering. Karl believes this breadth of experience has given him a well-rounded skill set with a holistic view across the engineering life cycle.

Karl has had the opportunity to work on a multitude of notable projects in the aerospace and defence industry, including the Eurofighter Typhoon, Dreadnought SSBN and Apache Attack Helicopter.

Read Karl’s full case study here.

Case Study Shivprasad

Shivprasad is a Chartered Engineer with 12 years experience in Aerospace Systems, that specialises in the design, development, and delivery of systems, products and services for commercial and military sectors. He is known for his strategic thinking, collaborate leadership and passion for innovation.

He has extensive experience in extending human survivability limits in submarine and aerospace operations. Shivprasad currently leads systems integration activities for small modular reactors in the nuclear sector.

Read Shivprasad’s full case study here.
Burge Hughes Walsh Limited (BHW) is an established consultancy and training provider with considerable experience in change management programmes incorporating elements of people, processes and systems.

As an INCOSE UK Endorsed Training Provider, Burge Hughes Walsh are offering an online 3-day course focused on the concepts, principles and practices of Systems Engineering. The 3-day Systems Engineering Fundamentals Course, derived from their most popular offering, the 5-day Systems Engineering Course, offers a comprehensive learning experience suitable for diverse participants. The course is specifically tailored to cater to the needs of individuals who are new to Systems Engineering, providing them with a comprehensive overview and practical, applicable knowledge and skills. It also serves as a valuable opportunity for experienced professionals who have limited formal Systems Engineering training, but are eager to explore new tools and processes. In addition, the course welcomes anyone with an interest in exploring different perceptions and practices of Systems Engineering.

The course will be primarily devoted to processes and tools that will allow attendees to gather and specify Stakeholder Requirements, analyse the “problem” described by the Stakeholder Requirements to determine the System Requirements, design the system to meet requirements through the exploration of technological and architectural choices, undertake detailed design to specify the robust optimum, and confirm the engineering activity and solution through verification and validation.

As well as this, attendees of this course can expect to gain understanding and specific knowledge of how to apply Systems Engineering to the design of complex systems. **Attendance of this course can also gain you 21 valuable Professional Development Units (PDU)** which can benefit those looking to gain or maintain certification.

**The course being online provides participants with the convenience of remote learning and cost savings** such as travel expenses and accommodation costs. Furthermore, Burge Hughes Walsh eliminating the need to travel, allows you to learn and participate in this course from the comfort of your home.

To book your place on this course, visit the [INCOSE UK website](https://www.incosecourses.com/). For more information on Burge Hughes Walsh, visit their [website](https://www.burgeshugheswalsh.com).
LET’S ENGINEER TOMORROW’S SYSTEMS

We are hiring across our systems engineering division with opportunities across multiple locations and for varying levels of experience.

Join Atkins, a member of the SNC-Lavalin Group, as a Systems Engineer in our growing Aerospace, Defence, Security and Technology division, and you’ll be part of a team that provides independent and objective advice in mission-critical sectors.

In a culture that never stops developing and investing in new capabilities, we turn bold ideas into reality. Here, you’ll be supporting complex systems engineering projects through the application of systems thinking and systems engineering methodologies. The work is complex, and we thrive on collaboration. You’ll bring your own skills and expertise to the mix and enjoy knowing everyone is pulling together to get the job done.

Our projects vary greatly in size, scope and scale. And there’s no such thing as one-size-fits-all with Atkins. With such a broad range of significant projects for you to work on, you’ll have lots of opportunity to grow and challenge yourself.

We know that different people have different priorities, which is why we’re here to support you with whatever you need. We’ve designed our flexible and remote working policies around our employee’s wellbeing.

Find out more and apply today at Aerospace, Defence, Security and Technology. Careers.atkinsglobal.com
INCOSE UK News

‘Paper Presentation’ Series Continues

INCOSE UK proudly introduces the captivating ‘Paper Presentation’ series, a platform that grants award-winning presenters from past Annual Systems Engineering Conferences the chance to virtually showcase their papers once again.

Vicky Anderson, a Senior Systems Engineer at KISPE, received significant recognition at ASEC 2019. She secured 2nd Place Presentation and 1st Place Paper for "The Open Source Satellite Programme: Using Systems Thinking and MBSE to Align the Team and Explore the Problem" as well as winning Best Newcomer.

Vicky’s presentation discussed the Open Source Satellite Programme and explored the Systems Thinking and MBSE approaches used by the team, as well as challenges faced in transitioning to these methods. It also highlighted techniques for team alignment and stakeholder engagement, and outlines the intended approach for the detailed design phase.

Vicky presented her award winning paper live via Zoom on the 6th July 2023. However, don’t worry if you missed it! The recorded presentation is now available for viewing on the INCOSE UK YouTube Channel.

Paul Davies then took to the virtual stage on the 25th July to present the paper that won him 1st Place Presentation at ASEC 2019, “Interface Management - The Neglected Orphan of Systems Engineering”.

Paul’s presentation delved into the topic of interface management and highlighted its significance in engineering successful systems. It discussed key concepts in best practice for interface management and drew attention to the differences between interface management and system architecture practices.

Paul’s presentation is also available for viewing on the INCOSE UK YouTube Channel.

Keep an eye on the INCOSE UK Twitter and LinkedIn pages and the INCOSE UK Events Calendar to stay informed about upcoming Paper Presentations by other award-winning ASEC speakers.

ADVERTISE WITH INCOSE UK

INCOSE UK is a Professional Engineering Institute (PEI) focused on Systems Engineering. With over 1,300 members coming from diverse backgrounds covering purchasers, system developers and academics and representatives including aerospace, automotive, defence, transportation, communication and telecommunications, INCOSE UK is the best place to get your message across.

Please contact advertise@incoseuk.org for more information
Presentation Masterclass

This virtual event will take place on the 25th September 2023 at 12pm BST via Zoom and will be run by Laura Shrieves, Engineering Director for Thales Ground Transportation Systems and an INCOSE UK council member.

This virtual masterclass is intended to provide guidance on how to develop and deliver a presentation to align with the paper you have submitted to the Annual Systems Engineering Conference. Although this session is primarily aimed at people whose papers have been accepted for the Annual Systems Engineering Conference, it will also be of value to anyone who is looking to improve their own presentation technique.

The session aims to provide guidance on what makes a good presentation slide pack and how it should be structured and designed. As well as proving guidance on speaking and presenting yourself in a conference setting, the ‘Presentation Masterclass’ aims to give you an idea of what to expect leading up to and on the day of your presentation. In this session you will also get the opportunity to virtually meet the Technical Director of INCOSE UK, Jon Holt, and some established existing presenters to talk about their experiences. There will also be an opportunity for you to get answers to any questions that presenters may have.

To sign up for this event, please visit the INCOSE UK Events Calendar.

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To sign up for this event, please visit the INCOSE UK Events Calendar.

SYSTEMS ENGINEERING TRAINING

REMAINING 2023 DATES

INTRODUCTION TO SYSTEMS ENGINEERING WITH REQUIREMENTS WRITING

LEARN THE PRINCIPLES AND PRACTICES OF SYSTEMS ENGINEERING: INCLUDES A SPECIALIST REQUIREMENTS WRITING WORKSHOP

24-25 OCTOBER

INCOSE SYSTEMS ENGINEERING PROFESSIONAL (SEP) EXAM PREPARATION

PREPARE TO PASS THE INCOSE SEP EXAMINATION AT ASSOCIATE OR CERTIFIED LEVEL

11-15 SEPTEMBER 04-08 DECEMBER

Our scheduled training courses take place in central Lincoln but we take a flexible approach to our training delivery and can support on-site delivery. For more information visit: https://bit.ly/42NGudw or contact us via: cet@synthesys.co.uk
I’m a Volunteer

I’m a Volunteer and I Do…

Philip Jackman

Philip holds various volunteering roles, one of which is serving as a Professional Registration Advisor for INCOSE UK. Philip's decision to volunteer in this capacity stems from his desire to support young engineers and show his appreciation for the institution that advocates for his chosen engineering field. Engaging in this volunteer position not only exposes him to diverse applications of Systems Engineering beyond his regular job, but also aids in the development of his interpersonal skills.

According to Philip, there are numerous benefits to volunteering: not only are your contributions highly valued, but the profound sense of fulfillment you experience makes it all worthwhile.

You can read the full feature here.

I’m a Systems Engineer

I’m a Systems Engineer and I Do…

Tim Kerby

Meet Tim Kerby, a born systems engineer, who embraced the title after a remarkable 30-year journey. It took time for Tim to discover the discipline of Systems Engineering, even though he had been working in systems-related roles throughout his career. His advice to younger systems engineers is to prioritise problem-understanding over quick solutions, embrace the breadth of engineering early on, cultivate a strong network and foster a lifelong love for learning.

Tim says that by thinking like an systems engineer and constantly expanding your horizons, aspiring professionals can thrive in any industry and contribute to meaningful projects that positively impact society.

You can read the full feature here.
I’m a Systems Engineer and I Do…

Adam Rushforth

Adam is a systems engineer who discovered his enthusiasm for the field of Systems Engineering throughout his studies. What truly resonates with Adam is the remarkable diversity of work within Systems Engineering. He relishes the ability to engage with projects at different stages of the systems life-cycle and seamless transition between various industries.

Drawing from his own experiences, Adam strongly recommends aspiring Systems Engineers to seek out a range of opportunities as he states immersing yourself in these experiences is the best way to gain valuable insights and a deeper understanding of different types of work. Adam’s journey is testament to the dynamic and ever-evolving nature of Systems Engineering.

You can read the full feature here.

We invited Paul Schreinemakers from INCOSE Netherlands to contribute to this edition of I’m a Systems Engineer…

I’m a Systems Engineer and I Do…

Paul Schreinemakers

Paul, a systems engineer with diverse industry experience who currently owns his own business, emphasizes the importance of on-the-job learning, experimentation, and knowledge sharing particularly at events.

According to Paul, the most compelling aspect of Systems Engineering lies in its purpose, which he defines as "providing relevant information, at the right moment and at the appropriate level of abstraction, to facilitate decision-making about man-made systems." He also emphasizes the importance of tailoring processes in Systems Engineering. However, Paul believes the key to success in this field is getting the balance right between between processes, in-depth domain knowledge, and interpersonal skills.

You can read the full feature here.
North West Local Group News

The North West Local Group brings together systems engineers in the North West of the UK, providing a platform for them to share ideas, promote good practices, and engage in informal networking. Their mission is to cultivate a supportive community that enhances professional connections and facilitates collaboration opportunities.

Rob Black has been recently taken on the role as the Chair of the North West Local Group (NW LG), assuming the responsibility of connecting Systems Engineering professionals and fostering industry networks across Cheshire, Cumbria, Greater Manchester, Lancaster and Merseyside.

The INCOSE UK Council and NW LG members extend their gratitude to Julian Johnson (NW LG Immediate Past Chair) for leading group activities from 2020.

INCOSE UK members are invited to join either the North West Local Group or their Local Group by expressing their interest on the INCOSE UK website.

Architecture Working Group News

The Architecture Working Group (AWG) has maintained a strong and active presence since its establishment in 2006, conducting three plenary meetings annually. With a commitment to international collaboration, the AWG engages with forums such as the OMG, ISO/IEC and the INCOSE International AWG to shape international standards and best practices.

The AWG’s plenary meetings have been enriched by the presence of renowned international speakers, including Mark Lankhorst on ArchiMate, Aurelijus Morkevicius on UAF, and Sandy Friedenthal on SysML v2. The AWG have also recently activated workstreams led by experts such as Dale Edwards on the distinction between architecture and design, and open architecture, led by Raquel Lampaca-Vieira-Radoman to further the group’s architectural understanding within the advancing Systems Engineering community. The AWG continue to work on several future publications that aim to further the understanding of architecture and the influence of architectural thinking.

INCOSE UK members are invited to join the AWG by registering their interest on the INCOSE UK website.
The ‘Don't Panic!’ Series

The ‘Don’t Panic!’ series is a collection of thorough, short and easily digestible guides on a range of Systems Engineering topics. These guides, each no more than 55 pages, are available in both paperback and e-book formats from the INCOSE UK online store.


This book, which is the first edition of the ‘Don’t Panic!’ series, aims to provide an honest, straightforward and simple introduction to the world of MBSE that almost anyone can understand. Also available as a Japanese translation.

Don’t Panic! - The Absolute Beginner’s Guide to Managing Interfaces by Paul Davies

This book highlights the crucial role of interface management in the field of Systems Engineering. It aims to fill the gap in the engineering literature by offering practical methods and best practices and provide readers with valuable tools to improve their approach in this important aspect of Systems Engineering.

Don’t Panic! - The Absolute Beginner’s Guide to Architecture Framework by Aurelijus Morkevicius and James Towers

This edition of the ‘Don’t Panic!’ series aims to explain what an architecture framework is, identify their benefits, and describe some of the most common frameworks found in enterprise architecture, defence acquisition, systems-of-systems and Model Based Systems Engineering (MBSE). It guides you on choosing and tailoring a framework and provides links to further resources.

Don’t Panic! - The Absolute Beginner’s Guide to Architectures and Architecting by Mike Wilkinson and Tim Rabbets

This introductory book explores architecture in Systems Engineering, encourages rigour and draws on extensive practical experience. It aims to dispel the perceptions that architecture in Systems Engineering is abstract, complex, and difficult to understand and apply, and of questionable value. The book aims to bring clarity to the concepts of systems architecture.

Don’t Panic! - The Absolute Beginner’s Guide to Service Systems and Services by Simon Wright

This book delves into the overlooked realm of service systems and empowers readers to grasp the fundamentals of service systems and services. It aims to help readers design and implement more efficient and user-focused systems.

Available to purchase via the INCOSE UK online store.

www.incoseuk.org
The ECF held their in-person event in over 3 years at the beginning of July! The Birmingham Centre for Railway Research and Education (BCRRE) were kind enough to host us, and facilitated a thought provoking day filled with discussion around how the Rail sector has been adopting Systems Engineering and how this contrasts with more established domains like Defence and Aerospace. Attendees got hands-on with a train driver simulator, and gained an appreciation for just how complex a system our rail network is when trying to integrate new technology with 19th century infrastructure!

Systems Engineer in a Year

The ECF has been continuing its ‘Systems Engineer in a Year’ series with a session that delves into MBSE (Model-Based Systems Engineering). The session features an interview panel with Graham Bleakley, an MBSE expert, and a discussion on MBSE with Geoff Cooke. Additionally, Vicky Anderson, Senior Systems Engineer at KISPE, shares her insights on ‘How to Deliver Presentations as a Systems Engineer’. Both videos are available to watch on the INCOSE UK YouTube Channel.

The ECF are saddened to announce that Tom Aldous has stepped down as Groups Coordinator, and would like to thank him for everything he has contributed to the ECF during his tenure.

The ECF are looking for a new committee position to be filled – the Technical & Professional Development Coordinator! This new role is intended to advocate the interests of ECF members in these crucial areas, so that they can work with INCOSE UK to see where improvements can be identified, and what opportunities there are for up-skilling.

Voting is now open for the role of Technical & Professional Development Coordinator until the 9th of August, exclusively for ECF members. Follow this link to vote!

Committee Vacancy

Stay tuned for more exciting updates on the ECF! If you are interested in joining, reach out to ecf-chair@incoseuk.org
INCOSE UK Advisory Board

INCOSE UK would like to welcome Anturas Consulting Ltd and AECOM as the newest members of the INCOSE UK Advisory Board.

AECOM is a global professional services firm that is dedicated to creating a better world through infrastructure development. Across the globe, AECOM partner with their clients in the public and private sectors to solve the most complex challenges and pioneer innovative solutions. They deliver professional services throughout the project lifestyle including advisory, planning, design and engineering to program and construction management. AECOM also leverage their global defence, civilian and commercial expertise to provide comprehensive infrastructure, facilities, energy, environment, disaster resilience and civil works service for their clients’ most challenging global projects. Often as part of a consortium, AECOM deliver exceptional outcomes to their clients, managing organisational and technical complexity from the outset through the introduction of Systems Thinking. AECOM have proudly achieved the No.1 ranking on the Fortune magazine list of Worlds Most Admired Companies in our industry for a third year. They ensure an integrated approach through the robust application Systems Engineering principles, methods, and tools and best practice and are currently working with clients on major infrastructure projects in the transportation sector including NEOM, California High Speed Rail and HS2. In the energy sector, AECOM are the prime environmental and technical consultant for offshore wind on the US East Coast and advisor on the impacts of climate change on electricity distribution assets in Canada. AECOM is a truly global company with expertise and experience in multiple sectors solving diverse and complex challenges for their clients.

Anturas Consulting Ltd is an infrastructure management consultancy business headquartered in Edinburgh. The company was founded in 2017 by three business owners and has since grown to employ 20 people across Scotland, England, and Ireland. Anturas specializes in various sectors, including urban metro and light rail, heavy and high-speed rail, and active travel. Their company values encompass Honesty, Collaboration, Sustainability, Respect, Agility, and Competence. Anturas’ expertise is divided into four main areas: Programme Initiation, Delivery Management, System Safety Engineering, and Systems Engineering. The Systems Engineering team possesses extensive experience in areas such as requirements management, verification and validation, configuration management, testing & commissioning. They have applied their expertise to notable projects such as HS2, Edinburgh Trams Newhaven extension, and Glasgow subway. Currently, 75% of the Systems Engineering team are members of INCOSE, with one ASEP and one CSEP among them.
The 33rd INCOSE Annual International Symposium took place on 15 to 20 July at the Hawaii Convention Centre in Honolulu, USA. The symposium was a hybrid event that combined in-person and virtual elements in a way that unlocked a live dialogue between presenters and attendees—whether they joined in person or online. The event schedule included keynote speeches, invited content, paper presentations, tutorials, working group meetings, and social events.

This year’s symposium was attended by 1,030 delegates; 759 of which attended in person and 271 virtually, plus 157 guests. In terms of attendance representation per country, the USA made up the highest number of delegates, followed by Australia, Germany, Japan and the UK.

IS2023 began with a keynote speech by Matthew Kamakani Lynch, former Director of Sustainability Initiatives at The University of Hawai’i System. In this inspirational keynote titled ‘Cultivating Emergence for Transformative Change’, Matthew spoke about the unique ecosystem of Hawaii and the importance of sustainability initiatives in preserving ecosystems not just in Hawaii but across the globe. Matthew also spoke of the importance of taking the learnings of our ancestors and using that to guide us in our personal and professional lives.

After the opening keynote, delegates spent the day in sessions and working group meetings. INCOSE UK member and INCOSE Services Director, Richard Beasley, chaired a session on ‘Utilizing the INCOSE Services Integration Model to Optimize Value Delivery’ whilst Duncan Kemp, also an INCOSE UK member, chaired a session on ‘Digital Engineering, The Next Chapter’.

Day two was opened by Sir Julian Young, Past-President of the IET with a keynote on ‘Inspiring Systems Engineers: the Wonder Woman & Superman Methodology’. Sir Julian Young delivered a highly informative talk with some insights into his experience as an Officer at the Royal Air Force. Following the opening keynote, delegates went into sessions, working group meetings and sponsor presentations.


Day four ended with a closing plenary during which INCOSE’s President-Elect Ralf Hartmann set out his strategic goals for INCOSE, which are:

1. Continuously increase / revolutionise member value
2. Thought leadership, influence, and outreach
3. Growth and business evolution
4. Operational excellence

It was also announced during the closing plenary that the 34th Annual INCOSE International Symposium will take place in Dublin, Ireland on 2-6 July 2024. Click here to find out more.
As an INCOSE UK member, and therefore a member of INCOSE, your feedback on your membership is vital in ensuring a valuable membership experience. Don’t miss the chance to share your thoughts in the 2023 Member Survey.

It takes just 15 minutes to complete. Your responses will be kept confidential as the survey is being administrated by the independent third-party consulting firm, Kincentric, meaning no one from INCOSE nor INCOSE UK will have access to your individual answers.

The survey link was sent out via email on the 13th of July 2023 by the survey consultant, Kincentric (techsupport@modernsurvey.com), with the subject ‘INCOSE’s 2023 Member Survey is Here!’. Please check your junk box if you haven’t received it. If you encounter any issues accessing the survey, please email techsupport@modernsurvey.com for assistance.

The survey deadline is the 4th of August 2023.

Why should certification matter to you?

The competition is only getting tougher.

A relevant certification speaks to your dedication to learning, your credibility and your professionalism. Employers may look at certification as a differentiator.

INCOSE SEP and SE-ZERT® certifications offer a competitive advantage.

Increase your marketability and maximize your earning power: prepare for certification with CTI.

Find out more about SEP and SE-ZERT®

certificationtraining-int.com
The two-year programme enhances technical leadership skills, focusing on self-awareness, complexity navigation, and leading through influence.

Here’s what Daniel and Stephanie had to say about their selection into Cohort 9 of the TLI:

Daniel Hayden

I’m excited to start my TLI journey in Cohort 9. Over my twelve-year tenure at Cummins, I have held a diverse range of roles, all within the technical function. Most recently, my focus at the Cummins Power Systems business unit has been strengthening the understanding and implementation of Systems Engineering within our engineering functions. As a Systems Engineering Functional Excellence Leader, I drive change through influence and collaboration. Given that I don’t have a direct team or dedicated resources, leadership skills that empower me to effect behavioral and mindset changes are crucial. I have gained extensive knowledge and insights in this position that I eagerly wish to share with peers. I’m also excited to learn from their successful approaches to similar challenges.

As I continuously learn, my objective is to contribute to the growth of Systems Engineering’s and integrate its learnings effectively into our internal working processes.

In my role, I sometimes feel like a lone wolf, and I eagerly anticipate joining a like-minded community that educates and supports one another in addressing our unique, current, and future challenges.

Stephanie Lord

I’m very excited to be joining Cohort 9 of the TLI! In my current role at the SKA Observatory, my main challenge is not only to formulate a vision but also how to successfully implement it. I believe this requires technical leadership more than technical proficiency or knowledge. That’s why I applied to join the TLI. There’s certainly no substitute for learning alongside, and from, people with substantial experience in this area. Furthermore, influencing change is a complex science that cannot be reduced to binary choices.

It’s not solely about influencing change, but rather about understanding how to do so in an ethical way. I strongly believe that people should never be used as means to an end, and it should always be transparent how and why you want others to collaborate with you to achieve a particular vision. I am looking forward to exploring this angle with the Cohort.

But mostly, I’m looking forward to the medium of group learning as part of a diverse group where our perspectives will surely be as different as our time zones and industries. I anticipate that finding common touchstones and a shared language will be both gratifying and rewarding.
INCOSE News

Best Papers of 2022

Read the top 5 Best Papers of 2022 from the Systems Engineering Journal.
Free to access until end of August 2023.

INCOSE Members Newsletter Q2 2023

Read it now at incose.org/newsletter

PROSPER WITH INCOSE

The Power of Connection

Systems Engineering Vision 2035

Sponsored by www.incose.org/sevision

New Publication in the INCOSE Store

Guide to Writing Requirements V4
Free for INCOSE Members

Professional Development Portal
Visit incose.org/pdp
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<tr>
<th>Date</th>
<th>Event</th>
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<td>ASEC 2023</td>
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<td>22 Nov 23</td>
<td>AGM</td>
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<td>23 Nov 23</td>
<td>Joint Meeting</td>
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