Welcome

Welcome to the 76th edition of ePreview.

In the last issue, we announced the elections for Financial and Technical Director would be taking place. However these positions were unopposed, therefore we are pleased to announce Jon Holt (Technical Director) and Phil Savvides (Finance Director) will remain in their posts.

With only five weeks to go until the Annual Systems Engineering Conference, event preparation in the Secretariat is in full swing. This year’s ASEC is very special because not only is it our 10th annual conference; it is also the INCOSE UK Silver Jubilee— we turned 25 years old this September! Therefore, we felt “Celebrating the Future of Systems Engineering” was a felicitous theme for our conference this year. Just for fun, this year we will be holding a “Pre-ASEC” Pub Quiz on the evening before the conference, if you would like to learn more about that, the details are on page 5.

Over the last few months the popularity of sitting the paper version of the SEP exam has increased. More information about this can be found on page 11.

Lastly, we have a new instalment of ‘I’m A Volunteer and I do…’ from the chair of the INCOSE UK Railway Interest Group on page 8.
INCOSE UK Council Elections

INCOSE UK Council

INCOSE UK is managed by the Council that is elected by the membership (see figure below).

The council hold a minimum of four regular meetings per year.

A subset of the INCOSE UK Council are also directors of INCOSE UK Ltd. These directors are: President, President Elect, Immediate Past President and Finance Director. It is these posts, supported by the Company Secretary that constitute the Board of INCOSE UK Ltd and are responsible for the legal aspects of the Company.

Election Results

As the roles of Technical and Finance Director positions were unopposed, the INCOSE UK membership will not be required to vote. The personal statements can be read below.

Personal Statement for Phil Savvides - Finance Director

I am applying for the role of Finance Director because I would like the opportunity to continue the reforms that I, in conjunction with the Council and Dot-The-Eye, have been pursuing over the last 3 years. Going forward, the next three years are going to be critical for INCOSE UK as we shape and adapt the business to meet the demands of today and remain viable into tomorrow. I have enjoyed the challenge of being the Financial Director for INCOSE UK over the passed 3 years and feel like I still have a vital role to play to ensure INCOSE UK continues to be a sustainable, credible and professional institution with the goal of improving the world through Systems Engineering at its heart.

I am a practising Systems Engineer with 19 years experience within the Ministry of Defence (MOD). Part of my role is to grow Systems Engineers across the business and I have recently been instrumental in implementing SEMAP for the MOD, which is to be delivered through Loughborough University. I am passionate about Systems Engineering and its future and have an in-depth understanding of the INCOSE UK financial outlay. I believe I am well placed to continue to serve the interests of INCOSE UK and its members.
My name is Jon Holt and I am standing for my third term as Technical Director at INCOSE UK. I work for Scarecrow Consultants, hold a Visiting Chair in Systems Engineering at Cranfield University and I am a Fellow of both the IET and the BCS.

In my second term, I have been focusing on enhancing the INCOSE UK offering in terms of Technical Products and Technical Services. I have established the new INCOSE UK Publishing department. This was based on the success of the publication of ‘Think Engineer’. We have now established the Don’t Panic! Series of books, one of which has already been published, one that will be launched at the ASEC 2019 and three more that are currently in the pipeline. This has also been extended by the publication of the two TeamStorming guides for facilitating workshops.

I have also continued to oversee the updates and creation of Z-guides, Omega guides and technical reports by various Groups. At the ASEC this year, we will be launching the Z0 which provides a graphical overview of Systems Engineering best practice.

The ASEC has also seen several improvements during my term, such as the launch of new Technical Products and Services, facilitating the Systems Summit and also making a hard copy of the proceedings available to delegates.

I am continuing to promote Systems Engineering through the publication of my 11th—15th books on MBSE (published through INCOSE UK and the IET) and I have spoken at a number of INCOSE events, as well as promoting Systems Engineering generally through my STEM work via Festivals, professional lectures and public engagements.

I would ask you to consider voting for me in the upcoming election so that I can continue my work and help to raise INCOSE UK to more prominence in both the INCOSE and wider community.
ASEC 2019 Overview

There is still plenty of time to register and book for this year’s Annual Systems Engineering Conference. Taking place in the stunning Royal Armouries Museum in Leeds, West Yorkshire, ASEC is the UK’s premier Systems Engineering event, attracting a wide range of industry professionals, international presenters and practitioners. It provides a distinguished platform for networking, learning and sharing ideas.

This year’s two-day conference will have four renowned keynote speakers. On Day One the INCOSE presidents, Garry Roedler, Kerry Lunney and Alan Harding. On Day Two Professor Emma Sparks from Cranfield University, named as one of the 2018 top 50 women in Engineering.

There are Technical presentations on contemporary Systems Engineering theory and practice and tutorials run by leading Systems Engineering practitioners.

Click here to register.

Click here to view the Programme

Have You Booked Your ASEC Hotel Accommodation ?

There is no onsite accommodation at The Royal Armouries Museum, so delegates will be responsible for booking their own hotel accommodation. We recommend that you do this as soon as possible. We have compiled a list of hotels that are close to the Royal Armouries Museum. Please note that INCOSE UK do not endorse any specific hotel and have not endorsed any 3rd parties to provide hotel booking services on our behalf.

Accommodation suggestions can be found here.

Help us cover and share images of the event by using the event hashtag #ASEC2019UK on Twitter and LinkedIn.
If you are arriving in Leeds the evening before ASEC and wish to exercise your ‘little grey cells’, why not join us for a pub quiz? Team of up to 6. The quiz will offer a great opportunity for delegates to meet and network in an informal setting before the conference. The evening will take place on Monday 18th November 2019 from 6:30pm (for a 7pm start) at the Head of Steam Pub in Leeds.

**Address:** The Head of Steam, 7 Park Row, Leeds, LS1 5HN

The bar will be open if you wish to purchase food and drink while attending the quiz, the menu and drinks selection can be found by clicking here.

We would like to thank [QINETIQ](#) for sponsoring the pub quiz.
Sponsorship and Exhibitors
We would like to thank the following companies for Exhibiting and Sponsoring ASEC 2019.

Confirmed Sponsors

Confirmed Exhibitors
INCOSE UK AGM

INCOSE UK’s Annual General Meeting (AGM) will be held in the main lecture hall at Leeds Royal Armouries Museum prior to Day Two of ASEC.

The AGM is open to all INCOSE UK members, and not just paying attendees of ASEC 2019.

The AGM will commence at 8.30am on Tuesday 20th November 2019, and will last 30 minutes. The Council will present their reports and accounts for the previous year. This is your opportunity to find out what the Council has been doing on your behalf as INCOSE UK members, and what plans INCOSE UK has for the future. This also gives you a chance to raise any questions with the Council collectively or individually.

UKAB Companies

We would like to welcome IBM to the Corporate Advisory Board.

Early Careers Forum Election

The Early Careers Forum (ECF) was set up in 2017 as a way to better engage with the newer members of the Systems Engineering world and to give voice to those who have just started a career in Systems Engineering.

The roles of Group Liaison and Student Liaison will soon be up for election and is an ideal opportunity to become more engaged in the future of Systems Engineering.

The Terms of Reference will soon be available online and nomination details will follow in the next issue of e-Preview. The ECF will also be holding a meeting on day one of ASEC 2019.
Bruce Elliot reflects on his time volunteering for INCOSE UK.

What activities have you undertaken as part of your volunteering?

I think that my first volunteering activity was to join a British Computer Society working group which was developing a standard for software unit testing. That must have been in the 1990s although I admit that my memory has faded a little.

Since those days, my career has taken me from software engineering into Systems Engineering. I did join the technical committee of an IET conference on Systems Engineering as a volunteer and I have supported school Engineering Days organised by the Engineering Council. However, for the last couple of decades, most of my volunteering has been via INCOSE. I have chaired the INCOSE UK Rail Interest Group and the case studies sub-group of the international Transportation Working Group since 2005. I have also co-chaired working groups on in-service Systems Engineering in the UK and internationally and worked as a reviewer for applications for CSEP.

What originally inspired you to volunteer for INCOSE UK?

Engineering is a rewarding and well-paid career. I am lucky to have been able to follow it and, like a lot of my peers, I feel an obligation to put something back.

Many people who want to put something back choose altruistic options such as food banks and local church projects as mechanisms for doing this.

If you are an engineer, you also have the option of “putting something back” by contributing to the profession. This is not purely altruistic - there are tangible and foreseeable benefits accruing to the individual and their employer for making such a contribution. However, neither is it a purely mercenary decision; by definition, it plays to one’s strengths and there is the possibility of working with others to make a real and a positive difference. Improving the outcomes of engineering projects would make life better for everyone. And, when humanity finally gets serious about tackling climate change, it might just be very important indeed.

This path offered me a way of making a real contribution to something that I care about and I took it.
What do you feel that you get out of volunteering?

Sometimes, coming across someone in a car park without change, I have handed over a few coins and said, “Pass them on to someone else who needs them. I’ll get it back via the karmic exchange.” I don’t really think that there is a monastery in the Himalayas where monks keep track of our karmic accounts but it does sometimes feel that the world works like that: the more you put in, the more you get back.

Volunteering has given me the opportunity to work with some very interesting and capable people. I have learnt a huge amount and raised my professional profile to the benefit of my career. My career has been richer and more rewarding as a consequence of my volunteering activities.

Do you have any advice or feedback to offer anyone who is considering volunteering?

I offer the following advice:

1. If you take on a volunteer job, put aside your personal and professional objectives while you are doing it and focus exclusively on the task. You will get more done and your sincere commitment will make others who have taken similar decisions want to work with you.
   
   Remember the golden rule of the karmic exchange; you maximise the return on the investment of your time by making it with no thought for personal gain.

2. Approach your volunteering with the same professionalism with which you approach the day job but be prepared to adjust your methods. Leading a group of volunteers is not quite the same as leading a team at work. You can’t direct a volunteer; you have to negotiate an agreed approach with them. And you have to be patient; if work is being done in spare time it will take a while.

3. Be ready to say “no”. Once you have volunteered once, the requests for more help will keep coming. You are going to have to say “no” at some point. It will be better for all concerned if you do this before you are overcommitted.

And finally:

4. If you are not sure where to start, pick something that aligns with what you are good at and care about. The first step will open up other opportunities.
So, if you have been thinking about volunteering for a while but not taken the plunge, do make a start. You won’t regret it.

Biography

Bruce’s career has taken him from software engineering to Systems Engineering via systems safety engineering. For the last 17 years he has been focussed on helping railway companies improve their Systems Engineering processes. In 2014, Bruce was awarded a PhD by the University of Birmingham for research into the benefits of adopting SE approaches in a rail project. Bruce has been an active member of INCOSE UK for many years as described in the article.

The archive of ‘I am a Volunteer’ and ‘I am a Systems Engineer’ articles are now available online, featuring previous and new interviews with INCOSE UK Volunteers and systems engineers.
INCOSE UK continues to offer the opportunity to members to sit the paper version of the Systems Engineering Professional (SEP) certification examination. In 2019 we have held two INCOSE UK examinations, one in June and one in September. These were kindly hosted by INCOSE UK UKAB member Atkins at their Bristol offices.

Twenty four members participated over the two events and INCOSE UK would like to acknowledge the substantial commitment invested by all candidates in preparing for it. Nineteen participants achieved successful outcomes – a fantastic result. These individuals have gone on to convert these to ASEP and CSEP depending on their levels of Systems Engineering (SE) experience.

The paper examination has been running for some time and has been popular, primarily in the United States, with educational institutions. In the UK the general emphasis has been on the electronic version, hosted by Prometric at their exam centres in Manchester and London. More recently there has been a growing interest in the paper exam. There seems to be several reasons for this:

- An interest from companies in benchmarking SE skills amongst their employees. This is particularly helpful when bidding for work in this sector.
- It gives companies the opportunity to host examinations for groups of employees on their premises. This is cost effective where you have a larger number of participants and avoids unnecessary time away from the office or multiple travel and subsistence claims. UKAB companies are also eligible for a discount when they book an onsite exam.
- The onsite paper exam provides the opportunity for groups of colleagues to prepare together either formally through a training course or by supporting each other in study groups.
- Some candidates prefer a paper format. Recent feedback indicates that it gives candidates the opportunity to reflect on previous answers more easily than in the electronic version of the exam.

For more information on the exam or details of future dates, please contact Lynn Davis on profdev@incoseonline.org.uk
Below are the numbers of members achieving SEP Certifications through the UK online system along with total number of UK Chapter members who are certified.

<table>
<thead>
<tr>
<th>Level of SEP</th>
<th>UK accredited</th>
<th>Total UK (from INCOSE central records)</th>
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<tbody>
<tr>
<td>ASEP</td>
<td>94</td>
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<tr>
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<td>64</td>
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<tr>
<td>ESEP</td>
<td>3</td>
<td>10</td>
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We would like to send congratulations to the members who have attained ASEP, CSEP or ESEP since February 2019.

To view our range of INCOSE UK publications visit the online store.
A14SE Workshop—Invitation

Welcome to the first workshop on the application of Artificial Intelligence for Systems Engineering, 12-13 November, in Leganés, Madrid, Spain.

The event is directly promoted by INCOSE at large, EMEA Sector and INCOSE Spain. Get the latest insights and skills from technology leaders and practitioners shaping the future of Systems Engineering and artificial intelligence. Immerse yourself with the new tools, technology, and experiences that matter, and hear the latest updates and ideas directly from the experts. Provide feedback and influence the future of the discipline.

A14SE is designed to be the meeting point for industry and academia to share promising ongoing or relevant past experiences where AI is applied to improve Systems Engineering processes, methods or tools, with a clear focus on practical applications.

Click here to register

30th Annual INCOSE International Symposium- Call for submissions

Next years INCOSE International Symposium is taking place in Cape Town, South Africa from 18-23 July 2020. The symposium is the premier international forum for Systems Engineering, the event attracts an international mix of professionals at all levels, including practitioners in government and industry, as well as educators and researchers.

The Symposium is now accepting submissions for Papers, Panels/Roundtables, Tutorials and Presentations.

More information can be found at the Symposium website.
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| 30 October 2019      | **South Coast Local Group - INCOSE Certification and Chartered Engineering**  
Considering certification or professional registration but unsure if it is right for you, how to go about it and what is needed?  
Ian Presland’s talk will explain what INCOSE offers regarding professional development in the UK and in particular the relationship between professional registration and certification. Ian will give an overview of the new Competency Framework and how that can help with personal professional development.  
For more information click [here](#). |
| 12-13 November 2019  | **INCOSE Spain—Artificial Intelligence for Systems Engineering Workshop**  
The event is directly promoted by INCOSE at large, EMEA Sector and INCOSE Spain. Get the latest insights and skills from technology leaders and practitioners shaping the future of systems engineering and artificial intelligence. Immerse yourself with the new tools, tech, and experiences that matter, and hear the latest updates and ideas directly from the experts. Provide feedback and influence the future of the discipline.  
AI4SE is designed to be the meeting point for industry and academia to share promising on-going or relevant past experiences where AI is applied to improve Systems Engineering processes, methods or tools, with a clear focus on practical applications.  
For more information, click [here](#). |
| 18 November 2019     | **ASEC 2019 Pub Quiz**  
From 6:30pm (for a 7pm start) at the Head of Steam Pub in Leeds.  
Address: The Head of Steam, 7 Park Row, Leeds, LS1 5HN |
| 19-20 November 2019  | **INCOSE UK - Annual Systems Engineering Conference**  
ASEC 2019 will take place at the Royal Armouries Museum in Leeds. Use #ASEC2019UK across Twitter and LinkedIn to get the latest news about the event as the programme develops. To book to attend ASEC 2019, click [here](#). |
| 20 November          | **INCOSE UK - Annual General Meeting**  
The AGM will take place prior to day two of ASEC 2019 at the Royal Armouries Museum. Please note that attendance at ASEC is not necessary to attend the AGM. |
| 25 November 2019     | **Service Systems Engineering Working Group**  
10:30-14:30.  
Address: Rolls-Royce plc Whittle House WH73 PO Box 3, Filton, Bristol, BS34 7QE, UK  
Sat nav postcode - BS34 6QA  
To book for this event click [here](#). |
INCOSE UK Communications Director
Hazel Woodcock

INCOSE UK is the UK Chapter of the International Council on Systems Engineering.

The ePreview newsletter is provided free of charge to our members, on an ad hoc basis. The aim of this publication is to keep our members informed of developments within the UK Chapter and to shine a spotlight on our regular events, as well as promote and encourage participation.

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