2017

INCOSE UK Annual Report

YEAR ENDING DECEMBER 2017

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Introduction from the President

I am delighted to report that 2017 was a strong year for INCOSE UK. Financially we returned a small profit - the first for three years - and we continue to strengthen our operating model so that we can continue to invest in delivering our Mission and Vision. However, as the Financial Summary highlights, there are some challenges for 2018.

In September 2017 I was delighted to be invited to the Engineering Council's Affiliates Seminar to present our new Guidance in the Interpretation of UK-SPEC. The guide - endorsed by the Engineering Council - is now available to download for free for all members, and is another clear demonstration of our continued commitment to encouraging all systems engineers to seek appropriate professional registration.

Some of our other significant successes:

- Early Careers Forum - in April the Advisory Board (UKAB) hosted a concept event to explore the viability of an INCOSE UK Early Careers Forum. Around 40 early career systems engineers from across the UKAB membership came together to discuss their early career challenges and to identify opportunities for INCOSE UK to provide support. I am delighted to inform you that following the success of this event the INCOSE UK Council endorsed a proposal for establishing a forum which stood up formally at ASEC

- INCOSE UK Systems Summit, running parallel to ASEC Professor Jon Holt facilitated a workshop drawn from key leaders and influencers from across the UK to discuss some of the most significant systems challenges

- The Arnold and M'Pherson Lectures. To honour the memory of two icons of systems engineering ASEC key note addresses were renamed; Day One address now known as the Phil M'Pherson Lecture and Day Two the Stuart Arnold Lecture. I was deeply honoured that members of both families were able to attend and on behalf of INCOSE UK I was able to host them at our ASEC Dinner

- National engagement – we have been active in reinforcing the wider adoption and development of Systems Engineering practice, specifically supporting the following major initiatives:

  – SEMAP (level 7 apprenticeship in Systems Engineering)

  – Royal Academy of Engineering – I was delighted to host Claire Donavon and a small delegation to explore ways INCOSE UK can support the aims of the Royal Academy

  – Engineering Council – INCOSE UK continues to support the Council as an affiliate member and I was delighted to host the Engineering Council Chief Executive, Alistair Coates, at ASEC 2017

Of most importance, INCOSE UK is driven by the efforts of its volunteers, be they Council Officers, Working Group or Local Group Chairs, or the representatives of our corporate members. There are, and will continue to be, excellent opportunities for INCOSE members to get involved.

I look forward, in my final year as President, to continuing to working with the INCOSE UK Council, our Advisory Board and Secretariat, to continue develop INCOSE UK for the benefit of our members and the global systems engineering community in 2018 - The Year of Engineering!

Ivan Mactaggart, INCOSE UK President

Financial Summary
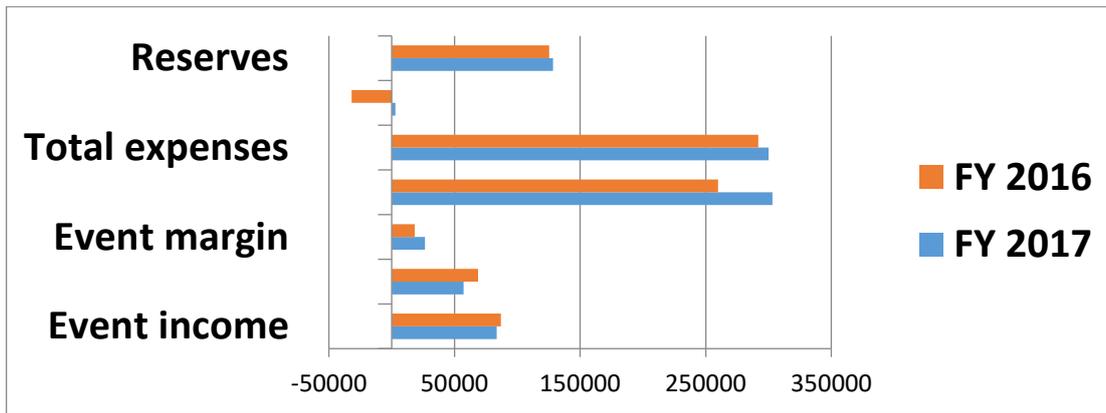
INCOSE UK has a healthy financial reserve, sufficient to maintain medium-term stability. In the 2016/17 financial year INCOSE UK returned a small profit of £3,056, which was the result of significant efforts to look to assure long-term sustainability whilst continuing to invest in member benefits. The situation was enhanced by a profit sharing arrangement with INCOSE International for the International Symposium in Edinburgh, which realised a £22,562 return for INCOSE UK.

Overall income has increased since 2010; however, this has also led to an increase in costs which has not been mitigated by the increased income over the period. There are several factors that led to this; an outdated Chapter Model, and; the costs of operating a complicated professional registration scheme by arrangement through a third party professional engineering institution. Additionally, significant investment has been made to introduce a Certification scheme. INCOSE International have commissioned a Central Governance and Finance team to produce a new Chapter Model, which it is hoped will mitigate the imbalance between individual member administration costs/income in 2018. The INCOSE UK Council decision to move to a more appropriate professional development arrangement in 2016 has reduced - although not eliminated - overall costs, and it remains unlikely that professional registration activities will achieve cost neutrality in the short to mid-term. Certification is starting to produce an income, although again it will some time before this achieves cost neutrality.

2016 saw an extended decline in sterling to US dollar rates, which continued to increase our payments to the INCOSE International office. 2017 started to see a more positive trend, however the overall effect was negative for the financial year. The introduction of the new Central Operating Model is expected to help stabilize fluctuations in exchange rates.
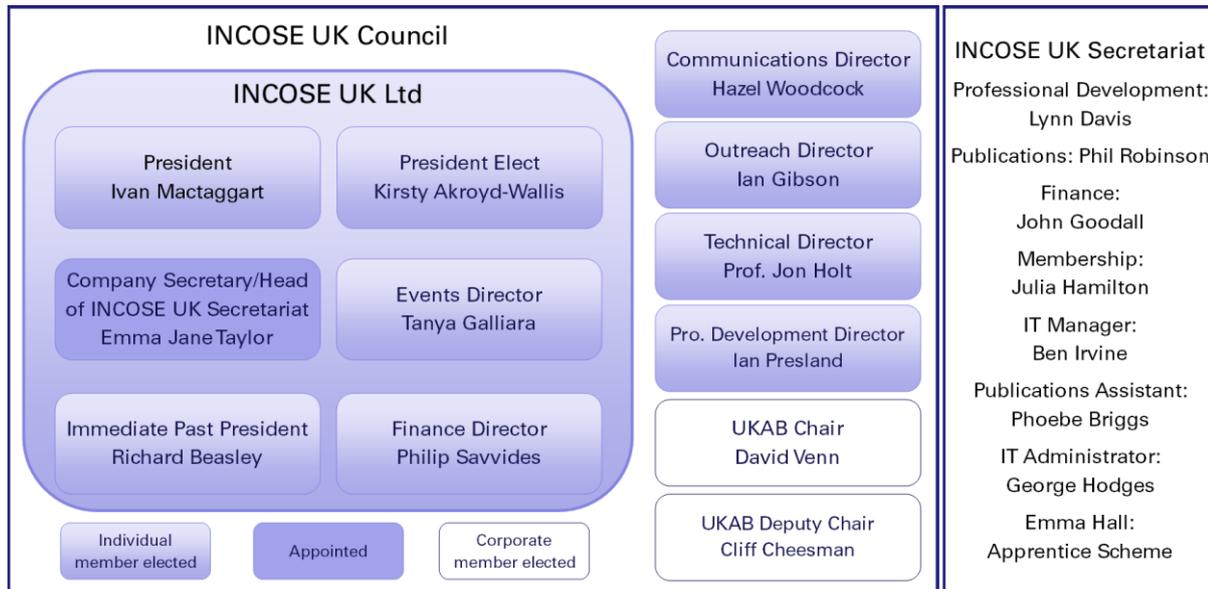
The INCOSE UK Council has explored a number of opportunities to increase revenue and the introduction of new publications such as '*Think Engineer*' and the '*Don't Panic!*' series are encouraging. The re-introduction of a Direct Debit mechanism for individual membership fee payment will also be explored in 2018 to assess the potential of reducing the operating costs of member administration.

Events, specifically our Annual Systems Engineering Conference (ASEC) continue to produce a strong return, and the continued investment by UK Systems Engineering organisations, through their Advisory Board membership, provide an environment to continue to invest where appropriate.

In summary the 2016/17 financial year returned a profit for the first time in three years. There are sufficient reserves to maintain the mid-term viability, although until the new Chapter Model is implemented and its effects known - alongside the introduction of new revenue opportunities - more work is needed to assure long-term financial sustainability, without reducing a wide and valued portfolio of benefits to our members.

Structure and Governance

The structure of INCOSE UK at the end of 2017 is as follows:

INCOSE UK Council

INCOSE UK Ltd

President	President Elect
Ivan Mactaggart	Kirsty Akroyd-Wallis

Company Secretary/Head of INCOSE UK Secretariat	Events Director
Emma Jane Taylor	Tanya Galliara

Immediate Past President	Finance Director
Richard Beasley	Philip Savvides

Individual member elected	Appointed	Corporate member elected

Communications Director
Hazel Woodcock

Outreach Director
Ian Gibson

Technical Director
Prof. Jon Holt

Pro. Development Director
Ian Presland

UKAB Chair
David Venn

UKAB Deputy Chair
Cliff Cheesman

INCOSE UK Secretariat

Professional Development:
Lynn Davis

Publications: Phil Robinson

Finance:
John Goodall

Membership:
Julia Hamilton

IT Manager:
Ben Irvine

Publications Assistant:
Phoebe Briggs

IT Administrator:
George Hodges

Emma Hall:
Apprentice Scheme

The 2017 election was uncontested, and the following appointments were made:

- Tanya Galliara as Events Director for three (3) years
- Hazel Woodcock as Communications Director for three (3) years
- Ian Gibson as Outreach Director for One (1) year (in line with the Council election cycle)

Overview of INCOSE UK Activity

There has been a large amount of activity in 2017. A summary of the key activities that took place over the year have been broken down in the sections that follow.

Technical Section

INCOSE UK has published the first book in the *Don't Panic!* series. This book has been very popular, with sales continuing steadily both in the UK and internationally. INCOSE UK is also intending to publish a new Z-Guide in the next year and work on Z0 is already underway.

The development of an initial INCOSE UK Architecture Framework has started, having secured funding from both the INCOSE Foundation and INCOSE UK. This is a longer ongoing project as there has previously been no model.

The initial development of the INCOSE UK Endorsed Training Provider scheme is currently being trialled, with the intent to look at the feedback given and further improve and develop the scheme before rolling it out.

The INCOSE EMEA workshop in September was an opportunity for us to offer our own workshop session, looking at the 'INCOSE UK Enterprise Architecture' and this was a success. A case study was also published as a paper at ASEC 2017 by the INCOSE UK President Ivan Mactaggart and INCOSE UK Technical Director Professor Jon Holt, which focused on INCOSE UK and how we as a Chapter deliver the INCOSE missions. This paper was also very well received.

Groups

There were over 30 meetings of the various INCOSE UK groups over the course of 2017. Current active groups are as follows

Working Groups	Interest Groups	Local Groups
Agile Systems Engineering	Model Based Systems Engineering	Bristol
Architecture	Railway	Midlands
Human Centric Systems Engineering		North West
Model Based Systems Engineering		Scottish
Systems Engineering and Quality Management		South Coast
Systems Engineering and Project Management (SEPM)		
Service Systems Engineering		

Events Held

The highlights from 2017 were as follows:

- Training Day 2017 at Engineers House in Bristol
- Joint event with the IET: "*Architecture for Complex Systems*"
- ASEC 2017 at The Slate, Warwick University
- 30+ Local, Working, and Interest Group meetings

Events have only grown and improved over the years and after six very successful years as Events Director, Ian Gibson stepped down from the role and we welcomed Tanya Galliara to the INCOSE UK Council, in November 2017. Guided by Tanya, INCOSE UK anticipates our events to continue going from strength to strength.

Advertising and discussion of events has grown noticeably via email and on various social media channels, which has encouraged a positive dialogue and helped INCOSE UK improve preparation and take advantage of promotion for various events over the year.

Notable events for the future include:

- Training Day 2018 on 6th June at Marsh Farm Hotel, near Swindon
- ASEC 2018 in November at Cranfield University
- ASEC 2019 in November at the Royal Armouries Museum in Leeds

Professional Development

INCOSE UK has successfully renewed our Engineering Council Affiliate membership. This is in line with our expectations.

We have also successfully transferred all remaining INCOSE UK professional registrations to the SEE. We now have five formally trained professional registration interviewers and mentors in place and, rather encouragingly, we are starting to see an increase of transfers from other professional institutions to INCOSE UK.

In 2017 INCOSE UK published a guidance document for interpreting the UK-SPEC. This was formally presented to and approved by the Engineering Council, and is now available from INCOSE UK.

We have also made it easier and more accessible for professionally registered members to keep track of their registration by putting our membership and renewal portal live online. We have seen increased engagement from members as a result of this, and we believe that these efforts will prove to be very beneficial to INCOSE and the UK Chapter.

A third U-Guide was also added to the free literature offered by INCOSE UK. This document is an overview on CPD and is an excellent addition to the professional registration and certification guides.

In an effort to further promote professional development, INCOSE UK are more frequently presenting this opportunity to UKAB companies and, since this effort was implemented, we have seen a positive effect and an increase in interest and awareness from UKAB companies and individuals.

Certification

As of September 2017, the UK Chapter has:

7 ESEPs

57 CSEPs

30 ASEPs

At the INCOSE UK Training Day 2017, we offered the opportunity for candidates to sit the SEP exam onsite. This was very successful and we intend to continue offering this at events.

INCOSE UK has successfully completed a pilot on behalf of INCOSE for a Competence-based version of the CSEP experience assessment. This involved 7 candidates from 5 UKAB organisations. The required levels were met by all and now only need to pass the SEP exam. In the New Year we will publish a full report and technical paper to allow a full assessment of the pilot, and we extend our gratitude to the candidates, the assessors, and their employers.

Communications Section

Over the course of the year, INCOSE UK has had a focused task of improving engagement with members and has invested a more concentrated effort in our communication and periodicals. Both Preview and ePreview have seen a consistent and more stable readership due to this and we intend to continue on this path in the following year to improve numbers further.

There have also been more structured electronic and social media campaigns. Engagement via our social media channels has increased drastically but the INCOSE UK blog has seen slightly less improvement in comparison. Again, we take this approach into next year and look forward to seeing even better results.

According to the results of our membership survey, the three largest sectors that our members work in are Aerospace & Defence, Transportation, and Consultancy respectively. The survey also showed that a large portion of our members reside in the south of the UK and – of the lower number who live is other areas of the country – the majority are located in the Manchester area.

UKAB

The UKAB provides a forum for UK Systems Engineering organisations to influence the activities that INCOSE UK undertakes, and the Systems Engineering best practice that INCOSE UK promotes.

Over the past year the UKAB has been working to develop the Early Careers Forum, which has proven to be very successful. This original idea was tabled at the UKAB meeting in April 2017 and resulted in a very productive and enthusiastic workshop, which generated a host of initial ideas for the forum. Omer Elroubi was initially asked to act as interim Chair. Omer has since been elected as the Chair of the Forum and has been vital to developing the network, ideas, and progression of the ECF and Terms of Reference. The inaugural meeting was held at ASEC 2017 and we continue to support the group in its further development.

INCOSE UK has been probing further into establishing what UKAB members would like to gain from INCOSE. After presenting these ideas to our Chapter, we have established a series of prioritised recommendations that we can jointly pursue.

Alongside the UKAB meetings hosted by various companies, we have been making a focussed effort to run parallel sessions increasing awareness of Systems Engineering within the hosting company, and how professional registration and certification can be beneficial to members of the SE community.

The UKAB is supporting a review of the strawman that has been produced by the Organisational Capability Working Group, with the intent of recommending how it should be progressed and implemented.

INCOSE UK Awards

Professional Registration

The following individuals achieved Professional Registration in 2017:

CEng: Richard Brookes

CEng: David Ferguson

CEng: Ian Gibson

CEng: Daniel Munoz

CEng: Chris Payze

INCOSE Systems Engineering Certification

The following individuals achieved INCOSE Systems Engineering Certification in 2017:

ASEP		CSEP
Colin Bach	Ian Ridpath	Tanya Galliara
Steve Bremner	Sarah Routley	Philip Jackman
Matthew Harris	Ian Smith	Ian Smith
Cliff Cheesman	Catherin Stace	Robert Welby
Tim Kerby	Philip Savvides	
Paul A Makselon	Andy Ure	
Grant More	Richard Whittle	

Outstanding Service Award Recipients

The following individuals were recognised for their outstanding service on behalf of INCOSE UK:

Model-based Systems Engineering Working Group	For their dedication to INCOSE UK and Systems Engineering as a whole. This group has consistently been putting forward papers and knowledge for ASEC and have been so successful that they have decided to slit into separate groups.
Bristol Local Group	For consistently striving to maintain the continuity of the group through the delivery of high-quality and interesting events.