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As I put pen to paper, or should I say finger to keyboard, I am still working through all the things I need to do as a result of this year’s Autumn Assembly. For me there were lots of interesting and new opportunities that came out of the event.

For those of you who attended, I hope will agree with me that it was an outstanding success. The event seemed to come “out of the blocks sprinting” with excellent presentations, enthusiastic audience discussions and smooth, well oiled execution. I think the venue was ideal for the event and contributed to workshop atmosphere. I also think that Bob Alderman’s after dinner talk on the building of Tornado (the first mainline standard gauge steam locomotive to be built in the UK for nearly 40 years) answered O B Server’s [Preview, Spring 2009] expectation that it does indeed live up to its name speed-wise.

My thanks therefore, go to all the presenters and rapporteurs, Dot-The-Eye (Emma, Gareth and John), Rick Adcock and the events team, Andrew Farncombe and the technical team, our after dinner speaker Bob Alderman, the staff of the Scarman Conference Centre at Warwick and you the delegates for making this year’s Autumn Assembly one of our best events yet. For those of you who were unable to attend we hope to capture some of the proceedings in this and the next edition of Preview.

The AGM was an opportunity for the INCOSE UK Council to provide a briefing to the membership regarding all the activities undertaken this year in support of the organisation’s goals and our plans for the future. These included: where the money comes from and goes to, the new events format for next year, the communications and technical activities in support of the strategy, the new role of Professional Development Director and the INCOSE UK organisational structure and election process. For those of you who attended the meeting you would have seen the breadth and depth of INCOSE UK activities and the Council would like to apologise for overrunning the meeting trying to cover it all in half an hour! The aim is now to turn the AGM presentations into an INCOSE UK annual report – watch this space.

The International Symposium hosted by INCOSE UK in 1999 nearly broke the chapter financially and burned out the volunteers involved. Since then the successive INCOSE UK leadership has sought to ensure the organisation has a stable financial base. Up to May 2009, INCOSE UK has accumulated an approximately £111,000 surplus mainly thanks to an enlarged UKAB. This has allowed INCOSE UK to:

- Ensure the organisation has enough working capital and is able to underwrite a failed event (£60,000).
- Change the financial model for events (using better quality venues whilst maintaining the same price to delegates for the last 3 years).
- Pay for professional book keeping (a task that used to overburden the Finance Director).
- Pay for the strategy development with SDS Ltd.
- Pay for professional administration and website development and support.
- Produce higher quality publications/promotional material
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- Fund additional activities over the next year:
  - Architecture Working Group research proposal (£18,000)
  - Architecture Working Group representation on the ISO Standards Committee for Architectures (estimated £9,000 per yr)
  - Other potential working/interest group activities.

A key observation from analysing the accounts is that virtually all individual membership fees go to INCOSE Central. However, INCOSE UK incurs the costs of supporting the members which reduces the burden on Central’s administration. This imbalance is being addressed by Peter Lister and we will make a case to INCOSE Central to redress this.

Finally, after what has been another successful year despite the credit crunch and quantitative easing, I am looking forward to the opportunities and challenges in 2010. I would like to wish you all a merry Christmas and a happy and prosperous New Year.

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**Event Report: Autumn Assembly 2009**

**How was it for you?**

The INCOSE UK annual Autumn Assembly (AA09) was held this year on 26th and 27th October at the Scarman Conference Centre Warwick University (see right). AA09 was planned for 100 delegates, and we managed over 90 delegates on each of the two days. Of those around 35 from each day filled out a feedback form giving comments on the venue, event organisation and technical content.

**Venue**

This was another new venue for INCOSE UK. Again we made a tiered lecture theatre a priority, along with onsite accommodation and facilities for smaller tutorial and workshop sessions.

The general feedback on the venue, the general layout and quality of the other facilities was very positive. Some more of your
detailed feedback is discussed below, but the phrases “best venue yet” and “please use this venue again” were repeated by more than one of you.

Why You Came
Of those who responded, well over 60% cited some aspect of the event technical programme as the main reason for attending the event. Other reasons included: networking, finding out about Systems Engineering or simply renewing your membership. Based on feedback from the last two years, we settled on a format for AA09 with plenary sessions in the mornings and parallel sessions in the afternoons.

Sessions
The morning sessions followed what is becoming a traditional AA format of four 90-minute sessions, each covering current Systems Engineering “hot topics”. Each session is organised and facilitated by a member of the INCOSE community who has some expertise in the area and takes the form of short presentations on the subject plus at least 30 minutes of questions. This format has proven very popular with delegates and this year’s plenary sessions were very well received by the majority of delegates. A summary of the plenary sessions, including highlights of the Q&A sessions, will be published in the Spring 2010 edition of Preview.

One thing we have tried to do with these plenary sessions is to look at subjects in more detail and to try and answer the question “how can Systems Engineering (and in particular INCOSE UK) add to the understanding and practice of selected topics?”

We had very little feedback suggesting that the level of presentation or discussion was too detailed, so it would seem that this approach is working quite well. In fact the main area of negative comment was on the Enterprise Architecture session, suggesting that this session was deliberately organised as an introduction to EA, rather than a Systems Engineering view on what EA should be doing. The feedback on this session suggests that this is a topic we should return to at a future event.

The afternoon sessions were a mixture of half-day tutorials and smaller sessions in the main theatre. Again, responding to lessons from previous events we limited the tutorials to 30 delegates. The tutorial sessions proved popular, with very positive feedback from the majority of attendees. Not surprisingly, the Peter Checkland tutorial was very well received - we will have to summon up the courage to invite him back!

Tutorials v Presentations
The main issue raised on these sessions is that not all of them were really run as tutorials, but rather as more detailed presentations and discussion. We will need to think carefully about how we describe these sessions in future events.

The parallel theatre sessions repeated the morning formation of 90 minute sessions, but were pitched at a more “Introduction to” level. We were slightly surprised how well these sessions were received. This should serve to remind us that there is still a very valuable place in INCOSE events for a return to fundamental topics for a new audience. Another growing aim of the AA is to test the water for topics which might be turned into INCOSE UK Working Groups and to provide existing groups with an opportunity to try out their emerging ideas.

Emerging Topics
Two topics which emerged at this year’s event relate to the Capability Working Group. This group hopes to look at the system thinking behind an increasing interest in the role of Systems Engineering in delivering capability in defence and asks whether these ideas have any value to the practice of Systems Engineering in other domains. Another possible topic for discussion is the practice of Systems Engineering in smaller organisations, and the role of lifecycle and process tailoring in that environment.

What You Liked
As stated above, the general level of feedback on the event venue was very positive. Overall the shape of the main theatre, with a central area extending out into the seats to allow speakers to get close to the audience was a real bonus. There was also significant praise for the technical programme:

“Variety of topics – I especially liked the options of the tutorials”; “Genuine enthusiastic collegial interest in broad array of topics by attendees”; “Quality of presentations and Q & A sessions”. “I thought the venue was very good, the support from D-T-E was excellent, and the technical programmes and the enthusiasm from the delegates was inspiring. PS. I liked the after Dinner talk as well!”

What You Did Not Like
Some negative feedback was given for particular sessions, and for those small but significant details like the lack of plain paper in the delegate bags for taking notes on. A couple of people who sat at the very edges of the theatre could not always see the screen and a couple of speakers spoke too quietly. Two particular comments raise issues which we have seen before and tried our best to resolve:

“Still dominated by Defence/Aerospace. Useful for finding out about what/how the rest of that industry is doing, but less useful for getting a broader view of the commercial world.”; “Still very theory/academia focused – would like to see specific applications of SE.” “More case studies/lessons learned etc.”

The level of these concerns was much less than for AA08, or for the 2009 Spring Conference, but this still remains as a concern for the UK Chapter and for INCOSE as a whole. Theses are all issues we will take very seriously in future events planning.
Value For Money
On the difficult question of value for money the majority of you said this was either good or adequate. Clearly many of you are still finding it difficult to get permission to attend any event, and thus it is even more important to show the value of events to attendees in our promotional material. Some of you still think the event could be cheaper.

As we discussed in the Chapter AGM held during this event, the AA delegate prices has stayed the same since 2007, even though the event quality has risen and it is hard to see how we could further reduce the cost of these events without significantly reducing the content. All we can do is increase the value for money of the event by raising the standard of the content, which we feel we have done over the last 3 years. We hope that those of you who would also value some “cheap and cheerful events” will be able to attend one of our growing number of 1-day technical events or free local events over the next 12 months (see “Future Events” article).

Summary
I always like to end these write-ups with some of the feedback which made me smile. As usual a number of you found some of the rooms both too warm and too cold! One of these years we will find a temperature which you all like. The after dinner talk on the building of the first new Steam Locomotive for 50 years was generally well received; although one of my female colleagues was heard to mumble “what a bunch of big kids” as she left the room. One person even enjoyed the AGM whoever you are we suggest you try to get out more. Finally on that theme, someone complained about the price of drinks in the bar; personally I was far to busy working hard to notice!

In summary, many of you seemed to think that this was one of the most successful events we have run over the last few years, in terms of venue, organisation and content. With several of you asking for more of the same in the future. I would like to add my thanks to all of the INCOSE volunteers who helped make this possible, and to our friends at the Scarman Centre and Dot-the-Eye for their friendly and professional approach. I am looking forward to the challenge of living up to, and maybe even exceeding, the very high benchmark set at this event in 2010 and beyond.
I was asked earlier this year how the INCOSE UK “Board” is constituted, what roles exist, how do members get involved and what the election process is. These questions have prompted the INCOSE UK leadership to revisit the leadership roles and the election process, which has culminated in this article.

INCOSE UK Ltd’s Memorandum & Articles of Association state that the organisation is managed by a “Council” that is elected by the membership, see figure right. This “Council” is often referred to as the INCOSE UK “Board”.

The “Council” also consists of representation from the UKAB (voted for/appointed by the UKAB and not the ordinary membership) in the form of UKAB Chair and additional representatives based on the following UKAB membership ratios:

- 1-19 UKAB members = Chair
- 20-29 UKAB members = Chair plus 1
- 30+ UKAB members = Chair plus more than 1

The UKAB Chair and the additional UKAB representatives are changed annually.

The “Council” is supported by representation from the INCOSE UK Secretariat and by invited team members, who come along to support particular issues, for example, Working Group/Local Group Chairs.

A subset of the INCOSE UK “Council” also act as the legal directors of INCOSE UK Ltd. These Legal directors are: President, President Elect, Immediate Past President, Company Secretary, Finance Director and Events Director. It is these posts that technically constitute the “Board” of INCOSE UK Ltd and are responsible for the legal aspects of the “Company”.

In the past, with the exception of the President, President Elect and Immediate Past President, the cycle of positions for election has become blurred. To maintain continuity on the “Council” there is an automatic succession from President Elect to President to Immediate Past President each being a two year term. This means that a new President Elect is elected every two years. For the other board roles these are three year terms with two roles up for election each year. A retiring member of the Council can be eligible for re-election.

Elections for the “Council” are normally held at the Annual General Meeting (AGM), usually held as part of the Autumn Assembly, next year will be part of the new Systems Engineering Conference. However, due to the increasing number of members and a large proportion of them not being available to attend the AGM, this year we introduced an on-line voting system through the INCOSE UK website.

Unfortunately we did not receive any nominations and therefore were unable to test out our new on-line voting. Hopefully, we will have the opportunity to do this next year.

Nominations, drawn from current INCOSE UK membership and with agreement of the nominee, must be submitted in writing to INCOSE UK Secretariat by the announced deadline. Elections will take place online through the INCOSE UK website. The voting will commence from the announcement of nominees and will close on the weekend prior to the AGM. The results will be announced at the AGM during the autumn event. Candidates do not have to attend the autumn event or the AGM.

In the event of no nominations being received for any vacancy by the INCOSE UK Secretariat by the closing date, the “Council” may decide to nominate its own candidate for that vacancy, to be announced at the AGM.

There is an expectation that there will be a handover period between the out-going post holder and the newly elected member of the “Council”. The duration of this handover will typically be 3 months and will include both persons attending the next “Council” meeting.

At any point during an officer’s term, the post-holder may tender their resignation in writing to the President. On receipt of a letter of resignation, the “Council” may decide to appoint an interim post holder for that vacancy until the annual election process is completed. The next election process after the resignation will include nominations for the vacancy along with the positions up for re-election as part of the cycle defined above.

Following on from last year’s strategy work, the INCOSE UK Council has been putting into place plans to deliver the strategy. This includes more use of sub-committees under each of the key functional areas. These committees will require volunteer support from the membership and are a good way of getting involved and having exposure to the work that the Council carries out. If you find the idea of an INCOSE UK Council position a bit daunting, you might find getting involved with the committees a good way of seeing what is involved with eventual progression to the Council.

I hope that this article clarifies the make up and constitution of the INCOSE UK leadership team who are there to run the organisation for the benefit of the membership.

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**Figure: INCOSE UK Council**

**Figure: Summary of Election Cycle**
Notwithstanding our own publications, when was the last time you saw Systems Engineering in the general Press? For that matter when was the first time you saw it? It seems, to me at least, that coverage of Systems Engineering is pretty thin on the ground even today, when our systems are becoming more complex, more interconnected, errors and failures are more extensive, extreme or even catastrophic and the stakeholders more demanding and vocal.

The AIAA are currently running a campaign called ‘When did you know?’ – looking to gather and retell those first moments of ambition for flying, flight and all things aviation and aerospace. If INCOSE were to run a similar or equivalent campaign, where would we place the advertisement and the responding articles? In the UK we have ePreview and the Preview magazines; INCOSE as an organisation has INSIGHT and the Journal (both in soft copy automatically, in hard copy for additional fees), but do these publications have the distribution, accessibility and publicity that would get any reminiscences or articles to a broader audience? How do we give Systems Engineering the coverage and column inches that we all believe it deserves – or is all we deserve what we have?

The ‘Press’ referred to here could have many forms – the newspapers, the informed magazine articles, the textbook and the learned journal, each of which is aimed at and informs a different audience, with different background and perspective. Often the newspaper article must be brief, eye-catching, use few long words and be readable; accuracy may or may not be an important issue but it must tell a story (preferably one of human success against all odds) and at some level be perceived as informing. The longer in depth article – in a supplement for example – is likely to expand upon the topic of interest and be able to develop a theme for several paragraphs to highlight the complexity issues that have been overcome, or the ease of integration that was achieved, or the value that was added. Some will refer to the resolution of technical difficulties, others to the efficiency and ease of use; others still may actually use the “Systems Engineering” words as an indicator of the discipline and techniques adopted.

The textbook – in general read by few, loved by less, but a necessary doorstop and essential aid to articulating the now, as a grounding for solving the problems of the future. This form of press is generally weighty, predominantly academic and requires time and effort to understand (attributes which do of course in part summarise Systems Engineering!). These texts are key to the future, written by established and recognised practitioners for the guidance and betterment of the next generation of engineers, so that they may benefit from the learning and weight of experience that has gone before. Some of these texts are ground breaking and move the discipline forward, others are the fundamental necessary primer to get people started. I dare say the quality is variable; some are heretical, whilst others yet will be seen as cornerstone documents for the future.

And then there is the press of academic research, reflective of the underpinning thinking and development of the discipline; written to a recognised structure (of hypothesis, experiment, evidence, deductions and analysis, conclusions) and to a generally self-contained, self-selecting like minded community whose value statement is based on published papers, kudos and respect amongst peers. Two questions arise – how does this work get out into the broader community and how do we improve the underpinning numbers, respect and quality of those learned papers and journals?

I sense the answers to both are the same: firstly quality, secondly accessibility and finally publicity. Quality is the over-arching attribute required in order to make something worthy. In this academic environment there must be novelty, pertinence and interest, the research must be recognisably structured and relevant. Simple hypothesis statements are fine, but they will not garner the kudos necessarily and hence may not be published in the highest quality, most respected journals. How many of the papers in our Journal fall into that category? How many of them are truly accessible in terms of their language, their flow and development of the ‘story’ and finally how many of them do we, as systems engineers, know about and then the wider community (even of researchers) know about?

If our Systems Engineering press were to be couched in simple citation terms (an official document or speech that praises somebody’s actions, accomplishments, or character; official acknowledgement of merit (Ref: Encarta English Dictionary)), how well would we score? Our Journal is available from a respected publishing house, but it has competition (Elsevier, Systems Engineering – Theory and Practice; Taylor and Francis, International Journal of Systems Science) and each has a flavour and style that commends it to its particular audience. But if we are trying to get recognition and acceptance for our discipline, shouldn’t we be opening up our advertising and communications, making our research more available and promoting our endeavours by articulating properly the research developments and applications, the practical examples cases, the success stories, the developing issues - there are enough of them after all! From this library the communicators could then draw their articles for magazine and newspaper, the engineer both young and old could access the body of knowledge and developing thinking and the researcher could extend the discipline in context.

So, how do we get our message across? Perhaps herein lies our problem: what is our message, is it consistent and who expresses it? Do we make our message more complex and complicated than it actually is or need be (to suggest that only we as an exclusive group have the answer); are we uncertain of our discipline and because of its underlying multi-disciplinary nature feel we have no natural established place to publish – which is where our Journal comes to the fore. Do we carry prejudices and parochial views which limit our perspectives of quality, publication routes and the opportunities to uncover them? I think we have to look closely at ourselves to ensure that our ‘Press’ improves.

We have a vicious circle to break. People claim not to publish in our Journal because it doesn’t get cited and so publish elsewhere. This means that the Journal loses and reduces, thus enhancing the lack of quality issues. Others follow suit and publish elsewhere, and the risk that the quality drops further ensues until ultimately the Journal is lost – forcing everyone to publish elsewhere.
To all authors, in Industry and application as well as in academia and research; the press systems engineering receives is in your hands. You have a mechanism for getting the word to the outside world and a framework for the communication that is recognised and accepted; be clear and articulate in your articles and papers as you contribute to the knowledge base and cross refer / reference the work that is available; develop the hypotheses and use the evidence of the practical examples about you in the real world to prove or disprove the thinking; don’t just describe a new process or idea, demonstrate the value and use of the new processes you propose through collaborative efforts and reports; loose the prejudices. Excellent coaching and background stuff can be found within http://www.amazon.com/How-Write-Publish-Scientific-Paper/dp/0313330409

Opportunities abound at all levels of writing to get the message across and improve the ‘Press’ Systems Engineering receives. Get thinking and writing – there’s a paper in all of us.

The Magic of Capability

by David Hawken

In the UK MoD, we use the concept of Capability when talking about our military solutions and we have been doing so for many years. Therefore, it may seem surprising to learn that discussions along the line of ‘…it depends what you meant by Capability…’ are all too common. It certainly surprises me since our acquisition policy and guidance given in the Acquisition Operating Framework (see http://www.aof.mod.uk/aofcontent/operational/business/capabilitymanagement/capabilitymanagement_whatis.htm) is quite clear that a Capability is ‘the enduring ability to generate a desired operational outcome or effect…’

So why do people struggle with this concept? I have been asking myself that question and to try to understand the potential difficulties people may have, I have imagined myself as a magician and tried to determine my Capabilities.

During any of my magic tricks, at some stage I will need to distract my audience so I can secretly prime my trick. I can do this in any number of ways: I can wave my cloak around flamboyantly; I can set off a loud noise; I can shine bright lights at the audience; I can employ an assistant to perform a captivating dance. With the audience suitably distracted, surely I have demonstrated that I can produce an effect and I have a Capability.

Well, no, not exactly. Why? My first reason for discounting this is although I have produced an effect, ultimately a distracted audience is not what I’m after: I’m really after a delighted audience. So, although I need to distract my audience briefly, it is more a [Capability] function I need to perform to create my desired effect. My second reason is more subtle. Although I have a distracted audience this ‘system state’ is unstable and temporal and after my distraction has finished, the audience will very quickly return their attention to me, distrusting my every move.

So, what is the Capability I’m trying to deliver? Now I have primed my trick and I have the audience’s attention, I can amaze them with my delivery. The audience will gasp with bewilderment and applaud loudly drowning out any cries of ‘fraud!’ and ‘charlatan!’ from those who were not succumbed by my attempts of distraction. Is ‘bewilderment’ the effect I’m after and hence the Capability? We are getting closer, but I don’t want to be seen as a one-trick-pony, so I need to perform many successful tricks so the audience leave feeling happy and singing my praises. Surely, this is the Capability? Well, a few happy people are a good sign, but that won’t pay my mortgage. What I really need are the happy people to tell their friends, who come to my next performance and all the seats of the theatre are full. So, repeatedly filling theatre seats is my Capability? Or is an increased number of booking the effect I’m after? Or is it the effect increased media interest?

Of course, the problem here is I’m doing a bottom-up analysis and, as such, I don’t know when to stop. I suspect the answer will depend on what I’m trying to achieve: if I want to become the world greatest magician my Capabilities will be different to those I need to entertain children at a birthday party, although I suspect the ‘Capability Functions’ will be similar. If I were to address this problem from the top-down, the first question would be ‘what am I trying to achieve?’ and the confusion that resulted above would disappear. However, would it be obvious what Capability Functions I would need, the order in which I would need to apply them, what would be the resultant emergent properties/behaviours and how the Capability Functions relate to tangible products and services?

So why do people struggle with the concept of Capability? I suspect it is due to taking a bottom-up approach. People who work in project teams tend to see the world inside their project but not worry greatly about the world outside once they have set their boundaries. This makes understanding Capability difficult as projects deliver products or services rather than Capabilities. I also suspect that when someone in a project talks about ‘…Capability…’ they are using it as a short-hand for ‘…the product/service I am delivering for my customer…’

So, maybe it is always worth asking the question ‘it depends what you meant by Capability…?’ just to be sure everyone is talking about the same thing!

Local Groups & Working Groups

Bristol Local Group / APM: Delivering Systems Delivery Capability in the South West, Notes on Meeting 23 Sep 2009

At a Bristol Local Group Paul Shakespeare reported on a project, sponsored by the SWRDA, to investigate ways of improving “Systems Delivery capability”. Whilst this focuses on skills development, the challenge was approached by considering the outcomes wanted, and the means of getting there, rather than simply focusing on specific skills gaps (which can be too unresponsive). Rather than focusing on individuals the project looks at the outcomes required by the industries.

Notes on Event: The Lecture

The study was a SWRDA sponsored (importantly through the enterprise leg, not skill agenda). It was led by a working group that was predominantly industry.

The basic demand signal was that industry recognised problems arising from the need to handle the growing complexity of the solutions they need to provide (both in terms of the capability needed in solutions and in the complexity of the supply chain).
It was estimated more that 90% of professional development in Systems was done internally or by private providers – so no Quality Assurance and common understanding of what training achieved. It was found the reason for lack of “public” provision was due to no “demand led” agenda.

It was proposed that there is a need to focus less on a backwards looking “skills assessment”, because that will solve last years problems, instead the focus should be on forward looking and creating a sense of direction. A particular issue was to raise the awareness of the need for “Systems Thinking” across a much wider range of individuals.

It was recognised that good framework for managing complex projects and managing complexity exist in the INCOSE and APM competency frameworks. However, there are longer term and wider issues about the development of school and undergraduate education.

The Discussion

There was a wide ranging Q&A session regarding the linking of courses from different institutes. Clearly this is a newer way of working, and represents a challenge to adapt. There are examples where this is currently done, but needs to become more of a norm.

There was a view that this could be a way of “drifting” into a qualification, in essence turning the qualification around. The institutes provided modules have to have a quality check that shows they are master level, individuals can accumulate modules (for which there is a common understanding of the output) and professional institutes can see that an individuals qualifications “must be good” / relevant” because it has the common quality assurance

There was considerable discussion of the need for raising awareness. Many Systems Engineers worry they are either not consulted (soon enough), or that SE is used to justify a decision after it has been made. This requires awareness of systems thinking at a much higher level.

There was also a discussion regarding the benefits of better Systems Engineering on an organisation and its products.

How useful a directory of courses might be was also discussed. It would certainly be useful to those who know what they need, but there is a fear that such a compilation could lead to the “pointless near-theological debate” about what SE is.
News from the UK Advisory Board (UKAB)

Alan Harding (BAE SYSTEMS) has recently taken the position of UKAB Chair, with Ady James (UCL) continuing his good work as UKAB Secretary.
Leading-Edge Project Training
in London and Amsterdam!

Systems Engineering
for Technology-Based Projects and Product Developments
www.ppi-int.com/training/systems-engineering-course.php
5-Day Course and Workshop

LONDON, UNITED KINGDOM
26 - 30 April 2010
Presented by Mr. Robert Halligan

Course Code: P006-398
Holiday Inn London - Bloomsbury
8:30am to 5:00pm daily

Fee Structure
Standard Fee GBP1,595
Earlybird/Group Fee GBP1,435*
*Group fee applies to registrations of 3 or more delegates at the same time. Earlybird fee applies when payment is received 30 days prior to the first day of the course.
** Course dates are subject to change. Please check website for program updates.

Who Should Attend?
- Project Directors
- Project Advisers
- Project Managers
- Engineering Managers
- Systems Engineers
- Software Engineers
- Design Engineers
- Consultants

AMSTERDAM, NETHERLANDS
18 - 22 January 2010
Presented by Mr. Robert Halligan

Course Code: P007-259
Hotel Amsterdam - De Roode Leeuw
8:30am to 5:00pm daily

Fee Structure
Standard Fee EUR2,075
Earlybird/Group Fee EUR1,867*
*Group fee applies to registrations of 3 or more delegates at the same time. Earlybird fee applies when payment is received 30 days prior to the first day of the course.
** Course dates are subject to change. Please check website for program updates.

Who Should Attend?
- Acquirer Personnel
- Supplier Personnel
- Developer Personnel
- and anyone who, in any capacity, deals with requirements

Requirements problems are at the top of the list of why projects go wrong. The 3-day Requirements Analysis module takes participants step-by-step in workshop format through a practical requirements analysis, to achieve an objectively adequate standard of requirements. In Specification Writing (2-days), you will learn how to structure a requirements specification, and how to best express requirements and other text in English. Real-world examples generate group discussion to assist in understanding.

PPI is a Bronze Sponsor of both EuSEC 2010 and INCOSE International Symposium 2010.
The following article is based on the Events Director’s report to AGM made at the recent Autumn Assembly.

The UK Chapter Events Team has been looking at current and future events over the last 3 years. During that time we have seen the completion of a number of changes in the UK chapter. The main change effecting events is the increase in chapter membership, bringing with it a much greater spread of Systems Engineering experience and a broader range of member backgrounds; in particular in areas outside of our traditional defence and aerospace domains. Along with that has come a change to the ways the chapter raises funds for the additional activities which we provide above the standard benefits for INCOSE membership. It is worth pointing out that the UK Chapter retains only a very small amount of your membership fees, and most of the additional UK activities have to be funded in other ways.

We have all been hit by the recent financial difficulties. We want to continue to provide the benefits to UK members of a vibrant national chapter, but we recognise that it is getting harder and harder to justify attendance at national events unless the technical content is directly relevant to your day job. This gives us new challenges to both think very carefully about event sizes and pricing, and to ensure event context continues to be of a high quality and relevance to members.

As our UKAB corporate sponsorship has grown we have stopped asking for separate events sponsorship. Our big UK events are now very carefully budgeted to pay for themselves, rather than as our primary means of funding other chapter activities. To reflect this, the Autumn Assembly and Spring Conference delegate prices have largely stayed the same since 2007, even though the event quality has risen each year as we have introduced the benefits of professional events management, online registration etc.

This year’s Autumn Assembly made a small surplus, mostly because we reached the top end of our planned attendance numbers. The 2009 Spring Conference actually made a loss due to lower than expected attendance. While the healthy finances of the UK Chapter allow us to continue to run events with these financial risks, we must make sure that future events remain viable if we want to continue to fund a wide range of technical and other activities.

Another significant challenge has been the increasing “fixture congestion” caused by both additional INCOSE events in Europe, and the number of new Systems Engineering events being run by other organisations. We want to take advantage of, and grow, our influence as the premier UK Systems Engineering authority by playing a role in some of these events.

Based upon consideration of these and other factors discussed in detail in the UK chapter Strategy Document, we have developed the following high level events strategy.

By 2012 we aim to deliver:

- A new Systems Engineering Annual Conference, to be: "The Premier UK Systems Engineering Event"
- A programme of Local Group Events offering: "A free local event programme for all who want it"
- A portfolio of Focused Technical Events ensuring: "A short event relevant to each member each year"

The new Annual UK Systems Engineering Conference will be held in November each year to avoid congestion. This event will combining the best features of current Autumn Assembly and Spring Conference formats with technical papers, tutorials, guest speakers and other technical activities.

In 2011/12 we will be planning the first of these events based upon our experience of running national INCOSE events and looking for ways to grow the involvement of other organisations and the range of technical content.

Free local events represent a growing feature of INCOSE activity for many of our members. These part day or evening events are free to attend for members and non members and offer the chance for local communities to, meet talk and share ideas about issues relevant to them. Existing local events in Bristol, London and Scotland rely upon the hard work of local organisers to plan a programme of free events, using volunteer venues and resources wherever possible. INCOSE UK provides financial support and advice to these groups to cover low level costs and to pay one off costs for unusual venues, speaker expenses etc. For advice on how to run a local group see the UK Chapter website.

We aim to expand this network of local groups in 2011/12 such that all those interested in Systems Engineering have a programme of free events near them.

Focused Technical Events provide a way of promoting smaller scale and more focused meetings of interest to parts of the Systems Engineering community. We are still experimenting with this style of event, in terms of content, organisation and funding models. Successful technical events in the last 3 years have tended to be 1-day events for around 30-50 people, and cover either tutorials in key Systems Engineering techniques (e.g. soft systems and systems dynamics) or workshops on best practice in Systems Engineering domains (e.g. manufacturing and rail).

We want to respond to the needs of our membership such that by 2012 there will be at least one of these smaller events for each INCOSE member. A draft guide “How to run a 1-day event” is available on the UK website events pages.
The INCOSE UK events calendar is shown below, for updates, more information and registration visit the INCOSE UK website at www.incoseonline.org.uk

<table>
<thead>
<tr>
<th>Type</th>
<th>Title</th>
<th>Venue</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Events</td>
<td>Full programme of free local events planned</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop/Tutorial</td>
<td>Lean Systems free workshop</td>
<td>UCL - London</td>
<td>14th Jan 2010</td>
</tr>
<tr>
<td>1 day event</td>
<td>Back to basics - simple systems techniques that work</td>
<td>Bristol Local Group (North Bristol, TBC)</td>
<td>24th Feb 2010</td>
</tr>
<tr>
<td>Workshop/Tutorial</td>
<td>Systems Dynamics Master Class (Kim Warren)</td>
<td>Swindon, TBC</td>
<td>Mar 2010</td>
</tr>
<tr>
<td>1 day event</td>
<td>1 day technical events, with focus on local membership or specific domain</td>
<td>Volunteers welcome (existing local groups already approached)</td>
<td>April 2010</td>
</tr>
<tr>
<td>1 day event</td>
<td>Annual Systems Engineering Conference</td>
<td>TBC (central UK)</td>
<td>8 – 10 November 2010</td>
</tr>
</tbody>
</table>

A full programme of free events is planned for Bristol, London and Scotland. See www.incoseonline.org.uk. The Lean Systems Engineering event in London on 14th January is highlighted because this is an example of a free event for which the chapter have provide financial support to help cover the expenses of a guest speaker from the international community to come to the UK. See the UK events website for more details. Other local groups are planned; anyone who thinks they may be able to help start a group in their area should contact ian.gibson@incose.org.

The first two technical events for 2010 are already planned and details will be available soon. We have identified slots for at least three more such events around the UK in March, April and May, and would welcome any proposals for these. All enquiries or proposals should be sent to richard.adcock@incose.org.

As you can see if you read the various reports on AA09 and other events in this newsletter, the quality, variety and value of the events programme offered by the UK chapter has never been stronger. We hope that with the continuing support of our membership, and in particular those of you who volunteer their time in some way to the events effort, we can continue this growth and deliver our targets as part of the UK chapter strategy over the next couple of years.

Rick Adcock, Events Director: r.d.adcock@incose.org

If you have an event that you would like publicised in Preview or ePreview, or wish to contribute an article, please contact us by email at emmajane@incoseonline.org.uk

Not an INCOSE Member?
Join INCOSE UK To-day!

How do I join?
Fill in the on-line application at www.incoseonline.org.uk

What does it cost?
Full members pay £72 per annum (reducing to £68 if paying for a full year by direct debit). Students pay £20 per annum. Membership subscriptions are eligible for tax relief. The UK Chapter has been approved by the Board of Inland Revenue under Section 201 Income and Corporation Taxes Act 1988.

What are the benefits?
- A UK and world-wide forum for systems engineering
- UK and International Interest groups, Working Groups & Conferences
- A chance to influence the way Systems Engineering develops
- The opportunity to network and learn from other Systems Engineers
- Regular newsletters and Journal from INCOSE and the UK Chapter.

Preview is the Quarterly Newsletter of the UK Chapter of INCOSE, the International Council on Systems Engineering. All INCOSE UK members receive a copy of Preview, in addition to the regular e-mail bulletin ePreview. INCOSE UK Members may also subscribe to the quarterly Systems Engineering Journal, and INSIGHT, the INCOSE Newsletter.