



INCOSE UK

Newsletter

Fame at last!

"Applied systems thinking is the answer." This must be the case because Jack Lennox (Robbie Coltrane) said so and he's a big clever lawyer-chap. If, like me, you watched ITV's new 2-parter "Planman" then you will recognise this as the key to getting it all right. Essentially our Jack is a defence barrister in Glasgow who, bored defending criminals who are stupid enough to get caught, designs perfect bank-jobs for fun. The thing is while expounding the theory of how to get it right he evangelises on the subject of the art of systems thinking. He is seen reading a book of the same name, a book that some of our members will own.

Nothing he does looks even remotely new to me. The requirement is trivial: rob bank. The analysis is simple: research target. The design is the creative mitigation of risks and constraints. He doesn't even have to design anything to fulfil a function!

It has taken a relatively thin plot and a lawyer/Robbie to highlight the use of what we do for a living. Granted, our day jobs are not quite as glamorous as all that but next time you're asked what you do then say it's not what we do it, it's the way that we do it. Evangelise.

Guy Tugwell
CMC Chairman

London Region Next Meeting

WEDNESDAY 30TH APRIL 2003

INCOSE UK's London Region Interest Group's (LRG) next meeting is scheduled for 17:30 on the evening of Wednesday 30th April to be held at the American International University in London, based in Richmond, Surrey.

This next event will consist of a series of short presentations on the top five issues facing

representatives from the transport industry and will be chaired by Prof. Alan Smith (University College London). The presentations will include:

Mike Hayward of Carl Bro Ltd (road transport)
Kuldeep Gharatya of London Underground (TBC)
Glyn Roberts of Tubelines Ltd (the first PPP of the three London Underground operating companies)
Brian Halliday of Network Rail

The aim of the event is to explore the top 5 issues facing representatives of the transport industry and to see if there is a common theme. The issues can also be compared to the top five identified by the Defence Industry. The issues will also be categorised into whether they are; business level, project/system level, or detail level issues. The result of the evening will be fed back into INCOSE UK to help steer/generate working group activity to address these challenges.

The meeting will also nominate and elect volunteers to help sustain the LRG activity. In particular I am looking for volunteers for the following posts to help organise the event programme and to ensure in anyone's absence the LRG keeps functioning:

Group Co-ordinator
Meeting Organiser
Deputy Meeting Organiser (x2)
Communications

For more information on these roles or the event itself please contact me.

The next event LRG event after 30th April, will be held towards the end of July and hopefully we will be able to invite along one of the Deputy Directors of congestion charging for Transport For London (TFL) who will provide a briefing on the project and a current status of the results. Watch this space.

Douglas Cowper
University College London
Centre for Systems Engineering

Please send any contributions to this Newsletter to The Editor INCOSE UK Newsletter, Guy Tugwell, Brass Bullet, Pemchurch Chambers, 30-32 Cradock Street, Swansea, SA1 3EP
Tel: 01792 417227 Fax: 01792-558729 e-mail: guy@brass-bullet.co.uk

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Systems Engineering for Defence Flexible Part-time and Full-time MSc / Postgraduate Diploma / Postgraduate Certificate

Cranfield University's System Engineering Group, based at the UK Defence Academy, is the leading centre for Systems Engineering for Defence. We offer a range of postgraduate qualifications with great flexibility in modes of attendance and applicability to all aspects of defence.

The aim of the courses is to provide postgraduate education in the principles, procedures and practices of Systems Engineering. They are aimed at those involved in Systems decisions throughout the acquisition community i.e. Customer 1, DPA, DLO, DSTL, QinetiQ, Industry (Prime Contractors and the wider supply chain).

Career Opportunities.

Graduates of the courses are widely employable in a range of roles commensurate with their experience e.g.

- Multi-disciplinary team membership and leadership
- Capability Management and Requirements Management
- Project management (including risk management)
- The Defence Procurement Agency (DPA) and specifically those associated with IPTs
- Research Agencies
- The Defence Logistics Organisation
- Defence industries

The modules offered include:

Core Systems (CS) modules

(compulsory for PgDip/PgCert/MSc)

- Introduction to Systems and Systems Engineering
- Systems Engineering Lifecycle Processes
- Systems Engineering in Defence Acquisition

Advanced Systems (AS) modules

(compulsory for PgDip/MSc; one to be selected for PgCert*)

- Systems Engineering Methods and Tools
- Dependable Systems, including HFI, ILS, ARM and safety
- Synthetic Environments
- Realistic Lifecycle Considerations

Defence Technologies and Environments modules (compulsory for PgDip/MSc only)

- Software Intensive Systems
- Applied Defence Technologies

Continuing Studies

(compulsory for PgDip/PgCert/MSc)

This module ensures coherence through a spine of directed study, course work, case studies and practicals that are designed to integrate across CS and AS modules

Project (MSc only)

An individual research project will be undertaken based on a real-world subject chosen to be of direct relevance to the needs of the student and his/her sponsor and aimed at delivering real benefit from the application of systems engineering.

- * To obtain a Postgraduate Certificate students should select one optional module from the advanced systems modules.

MSc - One year full-time or three to five years part-time (normally requiring four to six weeks attendance per year over three years)

PgDip - Twenty nine weeks full-time or three years part-time (normally requiring four to six weeks attendance per year over three years)

PgCert - Normally requiring two to three weeks attendance per year over 2 years or approximately twelve weeks full-time depending on optional module chosen

Start date: September 2003,
Two intakes per year for part-time

For further information please contact:

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Do you want to contact over 300 Systems Engineers in the UK and Europe?

Place an advertisement in the INCOSE UK Newsletter. At £100 for a full page, £50 for a half page (using your copy) it costs less than the postage for your own mail shot.

We can also stuff your flyers with our Newsletter (charges dependent on impact on postage costs). We can negotiate reduced rates for educational or non-profit making bodies.

Remember that we will publish a listing of your forthcoming event absolutely free.

Contact the Editor (Guy Tugwell) or INCOSE UK Administrator (John Mead) with your requirements.

Please help. A great opportunity for you!

It is an eternal problem helping INCOSE members to get the full benefit of the organisation. This is mostly caused by memberships not renewing at the appropriate time and Central Office assuming therefore that they no longer wish to be members and deleting them from the list. Therefore no copies of INSIGHT, no Journal no access to the web-site and all that offers. INCOSE cannot be expected to print and distribute expensive journals to members for 6 or 9 months on the off-chance that they might renew. Some panic and renew at the time of the annual international event when they discover that they need to be a paid up member.

Some deliberately do not renew until the Autumn Assembly as that way their companies pay for their subscription as well as attendance fees.

A great opportunity to join now for the Spring Symposium and renew for the whole of next year at the same time. Do it now! The registration form is on the website.

Alternatively have a simple life, fill in a Direct Debit form and then it happens automatically every year.

You will find one at the back of the newsletter. Fill it in now and it will do the work for you.

John.

To follow the Alternative Abingdon!

Magnificent Maldon ? Classic Colchester, Wonderful Whitham, or Traditional Tiptree -where the jam comes from! Doesn't have the same ring does it but there is plenty to do especially in the middle of May. The hotel itself is set in 320 acres and combines extensive leisure, health, beauty, and sporting activities. However if you wish to make a weekend out of it as well as an educational experience there are many opportunities in the area. Interact with the elephants in Colchester Zoo, steam over to the East Anglian Railway museum, enjoy the blooms at Hyde Hall the nearby RHS garden. Take in the famous jam factory of Wilkin and Sons Ltd at Tiptree - you go right past the door anyway. There is even a SECRET Nuclear bunker 80 feet underground if you can find it - but if you are thinking of bringing the wife it will probably be Lakeside Shopping Centre boasting over 320 shops, 4 major department stores oh dear I am getting bored already but I know that there are two golf courses surrounding the hotel. Oh I nearly forgot the Freeport designer outlet up to 50% off, famous name brand shopping.

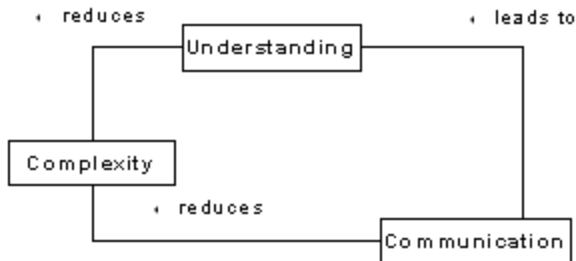
I think I will stay at the venue. It is more than a hotel, Golf, Country Club and Spa it is an oasis of tranquility for great minds to develop and be inspired. Take a look at the five lakes web site yourself and book early! I missed out the bits about dramatic Essex countryside etc - you can over do it !

Fore! Anyone for Golf ?

Play for the President's Cup. Well he is thinking of playing, but not yet decided about the cup! If you are interested in a round on the Sunday afternoon, or just a few holes on Monday evening let me know and we will see what we can organise. Email John.Mead9@ntlworld.com.

Brass Bullet Ltd.

Promoting excellence through the application of engineering



Project failure

It has been concluded many times and is a well-accepted fact that there are three main inter-related themes that lead to project failure: Complexity, Communication and Understanding. There is no single way in which to solve these issues, there is no proverbial silver bullet.

Project success relies on the integration of many diverse disciplines.

Requirements analysis relies on an effective approach to capturing and managing the customers needs and wants.

Quality, driven by several needs including legislation, in-house, industry or international standards all aimed ultimately at improving effectiveness and efficiency.

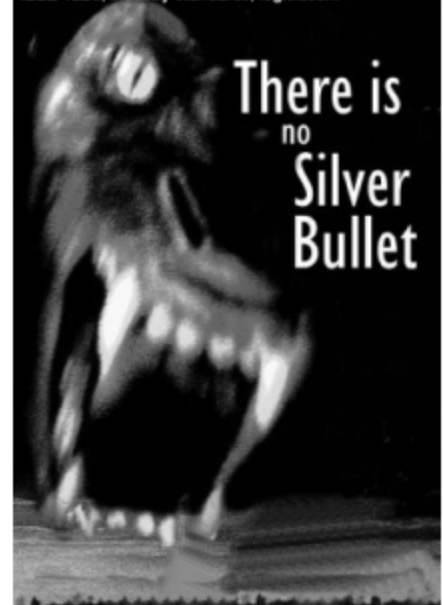
Processes are one focus of quality improvement along with seamless communication between project teams and individuals.

Brass Bullet Ltd adopts the Unified Modelling Language (UML) that facilitates the integration of such diverse disciplines aiding communication and a common understanding.

Brass Bullet Ltd is an independent systems engineering company, most well recognised for our exceptional training courses. However, our best work often takes a much lower public profile. Our consultancy is based on quality and delivers our customers with the ability to integrate the diverse disciplines needed for a successful project. Enabling all project stakeholders to communicate and gain a common understanding of any given complex project.

Brass Bullet Ltd has extensive experience in projects ranging from several thousands to several billions of pounds. We have a track record of delivering within budget and on time reducing the cost and risk of our customers' projects.

ISO 15288, Process Modelling, Requirements analysis
ISO 9001, SPICE ISO 15504, EIA 732, EIA 631,
IEEE 1220, industry standards, legislation.



Website: www.brass-bullet.co.uk
Email: enquiries@brass-bullet.co.uk

Exhibit at SS2003

You are now too late to provide a paper or put on a tutorial as the programme is sorted, printed and hopefully with this newsletter. I received the first booking for the conference today 12/3/03 and we haven't put the programme out yet. There is still time to book an exhibition space, there is still time to sponsor the CDROM, or the handbook unless someone has beaten you to it since I wrote this!

The exhibition is open Tuesday and Wednesday in the hall next door to the Conference. It is planned for us to use it for coffee breaks etc and to have it open during lunch and after close of the conference on the first day. The price has been fixed at £800 for the two days and includes a write up in the event handbook, the opportunity to put advertising material on the CD and lunches etc for two staff, CDROM and handbook with list of attendees. For an invitation to exhibit email to John.Mead9@ntlworld.com for anything else call 01344 422325.

Flyers

Thanks once again to all of you that distributed flyers for the SS2003 event. They have certainly been getting around. I had one request from overseas for me to take them off of our address list, but it was from someone who was not on our list, so it could have been yours. All the rest were positive. People joining, people requesting a brochure, people renewing, people asking why we were not covering 15288, people wanting to play golf and someone booking without the final programme being out. So thank you to you all! To those of you that did not send your flyers out, or put them on the notice board, or someone's PC screen, or ?? PLEASE DO IT NOW ! it does work, it is not too late and the more the merrier!

Please note the date of this year's Autumn Assembly . Monday 10th and Tuesday 11th November.

INCOSE Membership Board – Working to Better Represent You

After several years of study and preparation, the first INCOSE Membership Board (MB) was formally installed during the INCOSE International Workshop in early February 2003. Chartered to be the “voice of the member” within INCOSE, the MB is indicative of INCOSE's desire better to serve the needs of the membership while continuing to advance the state and practice of systems engineering. As one of the three representatives for Region III, I wanted to communicate

some important information regarding the MB and enlist your assistance for the coming year.

First, a little background on the MB. Over the years, two primary groups have represented INCOSE chapters and members: the Chapters Committee and the Regional Directors. By definition, the Regional Directors were forced to divide their valuable time between regional issues and strategic issues at the Board of Directors (BOD). This competition for time and effort often resulted in either in exhausted directors, or chapter and membership issues receiving less attention than desired, or both.

Beginning in 2001, INCOSE changed the governance arrangements: the Regional Director positions were slowly phased out and a transition team was created to prepare for a new body focused solely on the needs of chapters and members: the Membership Board. Elected at the close of 2002 and with a solid foundation to build upon, the Membership Board took office at the International Workshop. David Long (Region V) and David Wright (Region III) were elected the first chair and co-chair respectively. They will serve as MB representatives to the BOD and will help maintain the focus on you, INCOSE's primary customers. I should note that while David and David will continue to serve on the MB, Jonette Stecklein from NASA (Region V) and Gert-Jan (Jack) Ransijn from ADSE (Region III) were appointed to fill the “vacancies” that the chair/co-chair elections created.

With its mixture of international, regional, and chapter experience, the MB identified three priorities in its efforts to serve the needs of members and chapters:

- Communication was unsurprisingly confirmed as the top priority. This has to be from the membership to the various elements of INCOSE central, as well as in the reverse direction.
- We need to identify members needs, issues and priorities, and we decided this should be through the medium of a member survey. This initiative coincides with an existing effort led by Donna Rhodes as Director for Strategic Planning.
- We need to understand the current INCOSE initiatives and find ways to communicate these to members and to provide feedback on their views.

In summary, we feel we should aim to foster “vibrant chapters” with diversity of membership and application area. We should strive for a shared community of practice, with shared lessons, processes, and vocabulary. We should aim to improve the member experience, to ensure members feel welcome, and receive valued products and services which enhance their careers. We should also improve access to resources. Thus: good communications will enhance the

INCOSE membership experience which will facilitate vibrant chapters.

Watch for a number of initiatives over the next six months. First, you will begin to see INCOSE issue “Key Messages” to explain the main issues and decisions resulting from each meeting, and to communicate this to members in a timely manner. This first proposal from the MB was warmly embraced by the BOD, and we hope it represents the first of many such initiatives. Second, the MB is working with groups throughout INCOSE to compile a list of current INCOSE initiatives. This will not only ensure you keep abreast of INCOSE activities but also provide you an opportunity to get involved with those initiatives of interest. Finally, the MB is working with many others to perform the first in an annual series of member surveys so that we can better understand your needs, assess our performance, and help guide the future of INCOSE. When the time comes, I hope you will take a few moments to share your opinions and ideas.

Finally, I would like to ask for your help. As a volunteer organization, INCOSE can only be as successful as we, the members, make it. Please don't wait for a survey to share your thoughts with us. Take a moment to talk with your chapter leaders to let us know your expectations, what INCOSE is doing well, and how we can do better. And if you find an initiative of interest, volunteer to lend a hand. As we tap into and focus the tremendous energy and intellectual capability present in INCOSE, we can certainly advance the art and practice of systems engineering to address the global systems challenges we face.

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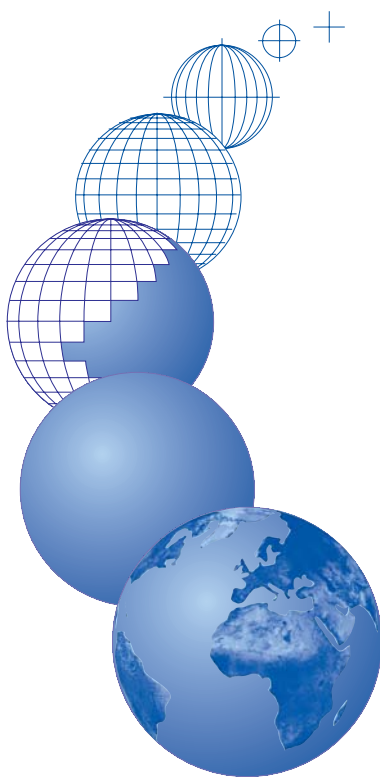
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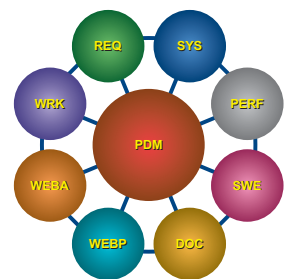
- Capture requirements, fast, with programmable parser and Word / Excel plug-ins
- Engineer the requirements and generate URD / SRD / ORD documents
- Built acceptance test cases and publish RTMs and PVMs
- Build UML and functional models and allocate requirements into them
- Evaluate alternative architectures and run performance assessments on them
- Build test plans and test specifications and publish for distributed comments
- Allocate requirements and models to the architecture and simulate behaviour
- Characterise system interfaces, and model and simulate protocol transfers
- Generate SDS / SSDS documents and interface control documentation
- Conduct software / hardware allocation and generate implementation specs
- Build UML / structured software models, code generate / reverse engineer code

- Manage test definition and execution, integration test and acceptance
- Manage the process with metrics, built-in CM, electronic / distributed reviews, alerts, annotations and e-mail links

Support stakeholders with customised tool interfaces, queries, views, forms, documents - all built by point-and-click tools, no scripting!

Publish requirements and models to website or document, or provide interactive view/edit access to them from users' web browsers.

Build product and system breakdown structures and link to corporate PDM / EDM systems.



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Academic Liaison



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J D Mead, The INCOSE UK Administrator, 20 Beehive Lane, Binfield, Berks, RG12 8TU

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Instruction to your Bank or Building Society

Please pay INCOSE UK Direct Debits from the account detailed on this instruction subject to the safeguards assured by The Direct Debit Guarantee. I understand that this instruction may remain with INCOSE UK and, if so, details will be passed electronically to my Bank/Building Society.

Bank or Building Society account number

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- This Guarantee is offered by all Banks and Building Societies that take part in the Direct Debit Scheme. The efficiency and security of the Scheme is monitored and protected by your own Bank or Building Society.
- If the amounts to be paid or the payment dates change INCOSE UK will notify you 14 days in advance of your account being debited or as otherwise agreed.
- If an error is made by INCOSE UK or your Bank or Building Society, you are guaranteed a full and immediate refund from your branch of the amount paid.
- You can cancel a Direct Debit at any time by writing to your Bank or Building Society. Please also send a copy of your letter to the Administrator at INCOSE UK.

