



INCOSE UK Newsletter

The Challenge of 2000

Whether or not you subscribe to the view that the next Millennium starts on 1st of January 2001, the year 2000 is a significant milestone for INCOSE. The organisation was founded in 1990, and so completes its first decade. Much has happened in this time, although it is recognised that there is much to be done if INCOSE is to establish a position as the first point of contact for Systems Engineering.

In the UK Chapter we have to face the challenge of increasing the level of professionalism of our operations. If the UK Chapter is to have any relevance to our members then it must add value to the underlying INCOSE 'product'. This means (amongst other things) staging interesting and relevant events, locally, nationally and (in co-operation with other European Chapters) in Europe. Successful events require considerable effort and planning, and it has become apparent that professional assistance is essential - especially for the larger events. It is also apparent that with the increasing diary of Systems Engineering events from all sources, that we need to plan in advance to ensure that our events are not overshadowed by competing events. The financial return from major events provides an important contribution to the overall running costs of the UK Chapter, and if we are to finance other initiatives (for example education and training) we need a continuous and secure source of funds. I have no wish to undervalue the considerable financial assistance that the Chapter has received from DERA, BAe and many other companies (in cash or in kind), but we cannot rely totally on what is basically discretionary funding.

My aim this year is to ensure that major events are posted at least 18 months in advance - if only by date and style. This gives time for venues to be chosen, contributions to be prepared (and just as important - reviewed), potential attendees to be made aware of the

dates to reserve in their diaries (and sufficient warning to raid the training budget) and events marketed through a wide range of publications. We still have some problems with the 2000 calendar of events, but I can give you an outline below, which should be confirmed shortly. Hopefully the events for 2001 will be published by mid-way through 2000.

There is still plenty of room for individual initiative, and I am pleased to see that more of you are taking up the challenge to establish local groups. The Bristol group is setting up a full programme for 2000, and now a group is emerging in the Southampton area. There is also promise of a Farnborough based group. As the UK Chapter gets larger, these local groups will provide a 'grass-roots' forum for members. Recognising the importance of this, the newly re-formed Communication and Membership Committee has been structured to include representatives from local INCOSE groups. This will be an important mechanism for gauging the needs and wishes of our membership when formulating events and planning strategy. So if any more of you are considering setting up a local group, try and make it happen in 2000 - the UK Chapter officers will be more than pleased to help you.

There is much to do in 2000, but I can assure you that it will be both enjoyable and worthwhile to take part. We will be using more professional support, but this will never replace the considerable amount of volunteer effort that is a major feature of the INCOSE organisation worldwide. We need more volunteers to support the 'old faithfuls' and to bring in new ideas and directions. If you feel that you have something to offer please get in touch with me and help to make 2000 a year to remember in the UK Chapter.

Pete Lister
President, UK Chapter of INCOSE

Please send any contributions to this Newsletter to The Editor, INCOSE UK Newsletter, c/o Peter Lister, Aerosystems International Ltd, West Hendford, Yeovil, BA20 2AL.
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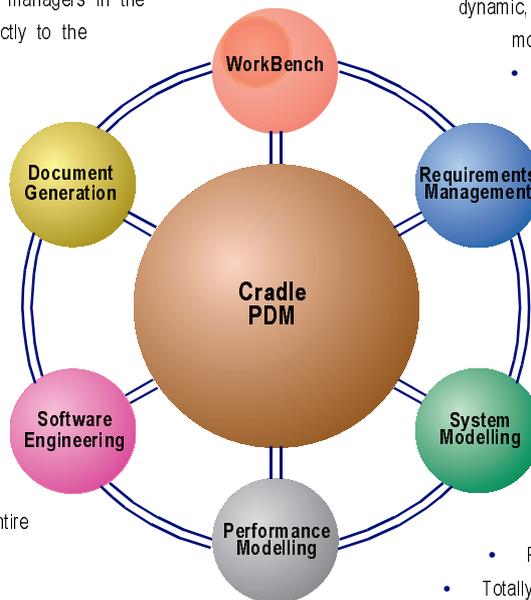
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MAY 15 TO 17 - UK CHAPTER SYMPOSIUM:

The proposed title is 'The Systems Engineer in Society', and the proposed location is somewhere in the Midlands - possibly Birmingham. The aim is to focus on non-Defence and Aerospace applications, but investigating whether Defence and Aerospace has anything to contribute to the application of SE to less traditional areas of SE. Soft Systems methods will also be featured. If anyone has a paper in mind, then be prepared to work it up when the call for papers emerges shortly.

SEP 11/12 OR NOV 6/7 - AUTUMN ASSEMBLY

This 2 day event is planned to include a number of half day panel based sessions to address specific issues in more depth. The date is uncertain because there is probably going to be a European Regional Event in Germany. This was originally planned for November, but the current suggestion is September 13 to 15, ending the day before the Oktoberfest Again, if anyone has an idea for a panel session, ideally for a subject that is ripe for debate, then Mike Prince (SEPDC Chair) would love to hear from you.

SEP 13 TO 15 OR NOV - REGION III EVENT

See above for explanation of date range. The German Chapter is planning to host a Regional event in Munich, details to be confirmed.

OCTOBER - AGM

It is hoped to arrange the AGM as part of a social event with lunch/dinner and an invited speaker. The plan is for the Bristol local group to 'host' the event, with a view to taking the event to different local groups in subsequent years. This should give more people the chance to attend a major UK Chapter event without incurring travelling costs.

LOCAL EVENTS

The Bristol group is planning three events in 2000, in March (lecture), June/July Requirements Engineering Workshop, and October (tba).

If any other local group has advanced diary dates then let me know, and we can include them in the INCOSE UK Event Diary.

Pete Lister

The Autumn Assembly

The four day format of the Autumn Assembly certainly attracted many more members than previous autumn activities despite the relatively short notice given of the detailed content. Overall a total of 122 people attended one or more days of the event, with the highest number attending one (36) or two (35) days. A total of 64 people attended the Soft Systems day which kicked off the event, and this high level of interest has encouraged

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Allen Fairbairn to go ahead with the formation of a Soft Systems Working Group.

The Soft Systems ideas also made their presence felt on the second day (the first that I attended) with many strands being picked up as the discussions developed around the paper/panel sessions. These sessions were envisaged as an extension of the panel discussions that are a feature of the International Symposium, with a bit more emphasis on audience participation. The subjects selected were driven by the availability of the protagonists for different sides of each argument but in the event they covered a broad spectrum of SE ideas and issues.

Ken Jackson led the debate on System Life Cycles, with contributions from Patrick Moore, Prof Hennes De Ridder and Brian Manning. I found this a very interesting session, despite the links with a life cycle being somewhat tenuous in places. I particularly remember Patrick Moore's comments on 'selling' the concept of disaster recovery systems to the financial sector, and his use of cartoons to beat the 3 second attention span of his customers. Brian Manning's presentation on SE in health was truly 'Soft Systems' and showed that the medical practitioners and the management team are working to totally different objectives.

Paul Davies chaired a session on Requirements Engineering that featured contributions from Jeremy Dick, Terje Fossnes, Prof Peter Sydenham and Galal Galal. Unfortunately I cannot recall any specific nuggets to regale you with because I was listening too intently and omitted to take notes. I am looking forward to the post-event publication of the proceedings, because I do remember that there were some new and challenging ideas on offer.

Col David Wright ran a session on In Service Systems Engineering. This is an area that has not received much attention in the past, but is becoming increasingly important to users of the systems that we design. The rapidity with which system components become obsolete now means that in service operation is not merely a case of maintaining the original equipment throughout its useful life, but implies continuous development.

Allen Fairbairn led the session on A Standard for Systems Engineering, always a topical subject. There were less fireworks than I had expected, with Stuart Arnold mounting a spirited defence of the ISO/IEC 15288 standard. With Stuart's explanation it became clear that the ISO standard has become an extremely high level document. The question now is where does this leave the standards for actually conducting Systems Engineering as practised by our members?

Many of the presentations from the Autumn Event can be seen on the INCOSE UK Web site (www.incose.org.uk),

and when all are gathered in they will be published in hard copy.

On the third day, the AGM was dispensed with in the minimum amount of time, resulting in the anticipated acceptance of the officers listed in the AGM calling notice. The only major surprise (not least to the recipient of the honour) was the election of Paul Davies to the post of President Elect. Paul now has two years to plan how he wants to develop INCOSE from Autumn 2001. The other point of interest is the revival of the Communication and Membership Committee under James Kirby of DERA. This committee was very active in the first few years of the UK Chapter's existence, but rather fell into disuse. It has been decided that the CMC has a major role to play in co-ordinating the UK Chapter's communication with its members, other Chapters, and other organisations.

The Secretary (Jeremy Goulding) is preparing formal minutes of the AGM, and these will be published in due course. The officers of the UK Chapter are currently as follows:

- President: Peter Lister, Aerosystems International Ltd
- President Elect: Paul Davies, Racal Defence Electronics Ltd
- Past President: Allen Fairbairn JBA
- Secretary: Jeremy Goulding, i-Logix
- Treasurer: Matthew Chittick, DERA
- Chairman SEPDC: Mike Prince, BAe Defence Systems Ltd
- Chairman CMC: James Kirby, DERA
- Academic Chair: John Boardman, JBA
- Industry Chair: Post vacant following retirement of Peter Robson
- IEE Representative: Patrick Moore, BCS Consulting
- National Advisory Committee Chair: Bill Bardo, BAE SYSTEMS

Pete Lister

Board Meetings

A meeting of the INCOSE UK Chapter board was held on 22 November 1999. Apart from it being nearly two months since the last one, it provided a perfect opportunity to review the outcome of the Autumn Event. It was agreed that the event was highly successful, and benefited from the help given by DERA in providing the location. It was felt that the short timescales for the planning and execution of the event could have reduced the number of potential attendees and it was agreed that we must plan further in advance.

The SEPDC has now been tasked with the detailed technical planning of both events. It is planned to extend and improve this model for next year, so that by the Autumn Assembly 2000 you will be able to plan your INCOSE year for 2001.

The other main subject for discussion was the financial state of the Chapter. INCOSE '99 was a highly successful event from the point of view of the technical quality of the content and the number of new members attracted. Unfortunately it was not a financial success, and as a result the UK Chapter 'missed-out' on the contribution to the funds normally raised from the UK Symposium. Much of the Chapter's funding has been derived from our events, and this funding is primarily spent underwriting subsequent events and supporting local activities. Of course putting on high quality events is an important service for members, and so it is vital that we maintain the virtuous circle of putting on events to raise the funding necessary to put on more events. The aim for the future is to raise sufficient surplus from events to allow other initiatives to be funded/supported and widen the influence of INCOSE.

Another Board Meeting was held on the 10 January 2000, and one of the aims was to finalise the 2000 event calendar. Unfortunately events conspired to make this less clear cut than we had hoped, and so it has not proved possible to publish the event list in this issue of the Newsletter. Be assured that these things will be sorted soon.

Pete Lister

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

Contact the Editor (Pete Lister) or INCOSE UK Administrator (John Mead) with your requirements.

Jim Brill Lecture

On 13 December 1999 the UK Chapter was privileged to host a lecture by Jim Brill at BAe Farnborough. The afternoon event was well attended, with around 40 members turning up to hear two talks. Jim was in the UK as part of a European visit centred on a conference in Paris. Allegedly Jim's kind offer to speak to the UK Chapter got him out of a Christmas shopping expedition in London, but I suspect it had more to do with his commitment to INCOSE. As a founder member and past president of INCOSE he maintains great enthusiasm for the aims and objectives of INCOSE and does his best to support INCOSE activities world-wide when the opportunity arises.

Jim's first talk covered the work he has been doing over the last 6 months or so for CNES (the French space agency) to identify good or best practice in Systems Engineering and publish in the form of a manual. It was interesting to see how the familiar elements of SE practice were organised to suit the needs of a specific enterprise.

The second talk was about integrating Concurrent Engineering, Program Management and SE. A quick canter through the definitions of all these (several of each) showed a degree of similarity, and the CE definitions in particular came very close to those for SE. Jim's conclusion was that these activities should be integrated and that they should be subject to a defined and disciplined process. He emphasised the point that process users need to be educated and trained in the process - there are too many examples of processes being documented but failing due to poor training of the people using them.

Overall it was a good afternoon with two interesting talks and plenty of opportunities for networking within the assembled audience. Many thanks are due to Jim Brill for offering to present, Peter Robson and John Mead for organising and advertising the meeting, and to BAE SYSTEMS for agreeing to host the event.

Pete Lister

Soft Systems Engineering Forum

Alan Rogers of DERA has established a Soft Systems Engineering Forum at <http://forums.dera.gov.uk>. It contains material on both the proposed Soft Systems Engineering Interest Group and the site itself. Anyone can view the site, but you need to register with the site Webmaster before you can post contributions.

Coming Events

KAIZEN: FROM UNDERSTANDING TO ACTION

A one-day Seminar and Prestige Lecture, presented by Masaaki Imai, author of "Kaizen: the key to Japan's competitive success" and founder of the Japanese Kaizen Institute.

To be held on Thursday, 30th March 2000 at IEE, Savoy Place, London.

Organised by Professional Group 12 (Manufacturing Strategy and Management) and supported by the Kaizen Institute and PT Citra Tubindo.

SCOPE:

"Those Kaizen workshops in Japan highlighted problems in our production which we had not even been aware of."
- Michael Macht, head of production at Porsche.

Kaizen, Japan's company-wide improvement programme, is regularly mentioned as a key element of success but few have really looked at its origins and had the chance to benefit from its true potential. "Kaizen: from understanding to action" will present the concepts of Kaizen, showing how it can bring the workforce into the corporate development programme.

Kaizen is much more than an isolated improvement project in the workplace, it is about involving all employees with continuous change required to keep up in the modern business environment. The Seminar will explain how this happens in the Japanese workplace and present a wide variety of speakers from British industry who have been involved with the implementation of Kaizen in their own companies.

The Seminar is not intended to provide a step by step guide to implementing Kaizen, instead it will present Kaizen in an objective light so that the audience can think about Kaizen and identify possible benefits, problems and liabilities that introducing Kaizen would bring. Kaizen does not get easier, after the initial implementation both the demands and the rewards continue to grow. This Seminar will help managers think through implementation planning to reflect the evolutionary development of Kaizen in Japan and create a long-term solution which fits the company.

EVENING PROGRAMME

The Seminar will be followed by a Prestige Lecture, presented by Masaaki Imai, founder of the Kaizen Institute and author of "Kaizen: the key to Japan's competitive success". After the Lecture, delegates are invited to join Masaaki Imai and the other speakers for a Gala Dinner in the Institution's Riverside Dining Room which affords a spectacular view of the river Thames from St Paul's Cathedral to the Houses of Parliament and the Millennium Wheel.

FURTHER INFORMATION

Please contact Mr Steven Plimmer, IEE, Savoy Place, London WC2R 0BL, Tel: +44 (0)20 7344 5427, Fax: +44 (0)20 7497 3633 or e-mail: splimmer@iee.org.uk. For more details visit the web site at <http://www.iee.org.uk/Events/i30mar00.htm>.

INCOSE has been invited to co-sponsor this event. Assuming this goes according to plan this should mean that INCOSE members will be offered reduced fees.

IEE Systems Engineering Roadshows

The IEE Profession Group A6, Systems Integration has arranged two meetings in the form of presentations / discussions with the aim being to:

- Demonstrate that the systems engineering approach is a very effective way to organising complex projects.
- Enable Members to contribute to the definition of systems engineering.
- Encourage Companies to adopt a Systems Engineering approach.
- Provide a platform for members' career development.

The meetings are co-sponsored by the UK Chapter of INCOSE.

Wed. 22 March 2000 commencing 6:00 pm (refreshments 5:30 pm) at DERA Portsdown West, Fareham, Hampshire

Speaker: Mr Leon Skorczewski, Director, Future Systems Group, BAE SYSTEMS and member of the National Advisory Committee on Systems Engineering.

Wed. 12 April 2000 commencing 6:00 pm (refreshments 5:30 pm) at DERA, St Andrews Road, Malvern, Worcestershire.

Speaker: Dr Bill Bardo, Technical Director, BAE SYSTEMS and Chairman of the National Advisory Committee on Systems Engineering.

Prior registration is necessary (at least 10 days in advance).

To obtain further information and to register contact:

Nancy Nancarrow

Tel: 020 7344 5398

Fax: 020 7497 3633

Email: Nnancarrow@iee.org.uk

INCOSE Local Event

The UK Chapter of INCOSE will be holding its first local event in the Southampton area at Archer

Communications, Hedge End, on Wednesday 9th February 2000, from 18.00 hours for 18.30 start, to 20.30 (to include light refreshments). The speaker for the evening will be Allen Fairbairn, Past President of the UK Chapter and two main topics will be covered:

SOFT SYSTEMS INITIATIVE

A keen interest in soft systems methods and tools has recently been uncovered, following the Brighton 99 Symposium and the UK Chapter's Autumn Assembly at DERA, Malvern in November. Further details of the emerging initiative may be obtained from the UK chapter's website at <http://www.incose.org.uk> or by the forum recently established and kindly hosted by DERA at <http://www.forums.dera.gov.uk>. The initiative will be taken further at INCOSE's International Workshop in Arizona during late January, where support will be sought for a Soft Systems Interest Group.

A report on the initiative will be presented, outlining the scope and plan for further work. There will be ample opportunity given for discussion of this initiative at the meeting.

SYSTEMS ENGINEERING, PROJECT & ENTERPRISE MANAGEMENT - 'GETTING IT ALL TOGETHER'

The essential partnership between Systems Engineering and Project Management has never been properly consummated, bringing the benefits that lateral thinkers in both camps had reasonably expected. Things move on and the landscape has already changed a number of times. We now need to be thinking about much broader issues if we are to realise the synergistic added value that sound systems engineering practices can bring to project and other venture based activity.

A strategic view will be presented of the role for systems engineering in the future. Topics will include:

- Emerging Processes and Standards
- 3D Concurrency
- Extended Enterprise Thinking
- System of Systems
- Complexity and Chaos Theory
- Soft Systems Methodologies
- Systems Thinking
- Self-Organising and Adaptive Systems

The sub plot for the presentation will be the use of simplicity to contend with the growing complexity of systems and their diverse means of realisation involving the interaction of diverse disciplines.

If you would like to attend please contact Sarah Curran at BAE SYSTEMS (Email: sarah.curran@bae.co.uk, Tel: 01202 404806, Fax: 01202 404972) for a location map and to ensure entry into Archer Communications due to security issues.

Two Short Courses

Integrated Systems Engineering - 17 to 21 January 2000
Venue: Burwalls Conference Centre, Leigh Woods, Bristol.

Contents: Introduction to SE Principles, Systems Engineering Process, Method of Working, Detailed Design and Implementation, Verification & Test.

Project Management - 14 to 16 February 2000

Venue: Burwalls Conference Centre, Leigh Woods, Bristol.

Contents: Operations Management, Soft Systems Methodologies, Customer Project Requirement Capture, Goal Setting, Planning & Control Systems, Management Decisions & Risk.

Each are five day residential courses involving academic and industrial presentations and case studies.

These courses are run as modules in the Bristol Consortium (University of Bristol & University of the West of England) modular MSc programme for Graduate Engineers & Managers working in an engineering design environment who wish to deepen their knowledge of modern competitive product management methods.

Course fee £850.00 including textbook, course material & meals, but excluding accommodation for each course.

For details contact the IGDS Office, University of Bristol, Telephone (0117) 9031110, e-mail: igds-office@bristol.ac.uk, or the Module Leader, John Carter, by e-mail at john.carter4@virgin.net.

News From NORSEC

The Norwegian INCOSE Chapter - NORSEC - has elected new officers for this year. The results can be found on our web site <http://www.incose.org/norsec/>. Here you will also find information about activities and events coming up in the near future. Among them is the seminar on January 31 and February 1 where the internationally known author and presenter Tom Gilb from Result Planning Limited will address topics on requirement specifications:

- How to determine a requirement - verbally and quantitatively
- The quality of requirements and QA
- Rules for requirement specifications
- Hints for implementation and requirements related to risk management.

Everyone is welcome to join this or any of NORSEC's seminars or meetings.

The Norwegian IT company EPM Technology (EPMT) has signed a collaboration agreement with BAE

SYSTEMS to develop and commercialise an advanced IT tool for Systems Engineers. The VISUAL-iSE project, to be headed by EPM Technology, will exploit BAe SYSTEMS leading edge research and technology developed for complex projects such as the Eurofighter/Typhoon. More information can be found at <http://www.epmtech.jotne.com>. This project is likely to be a topic for presentation at NORSEC's April meeting.

I would also like to address a topic that has been surfacing frequently over the last year within INCOSE in Europe, most recently during the INCOSE UK Autumn Assembly, the possibility of working together within INCOSE Europe in the value added domain of Interest or Working Groups. If you have a group in mind or if there is a wish from any established national groups to co-ordinate efforts or seek new members from outside your country, I will be happy to act as your point of contact in Norway as chair of the NORSEC IG/WG Committee. E-mail to tefossne@online.no.

Finally, as Regional Director I will be happy to bring forward any issues to the INCOSE Board of Directors or other appropriate targets within the organisation. These may be related to 'ways and means', policy, strategy, things that INCOSE should do or be concerned about, or even anything that might upset you about INCOSE. Please use the above e-mail or look me up on the NORSEC web page.

Terje Fossnes
NORSEC member and INCOSE Region III Director of Academia and Government in Europe

European Teleconference for INCOSE Chapters

The presidents of the European INCOSE Chapters and the two Region III Directors, meet bimonthly by teleconference. The aim is to strengthen relations between chapters, particularly in the area of co-ordination of events and common interests, and to increase awareness of the activities in each of the INCOSE European Chapters. The first of these conferences was held in September last year, and we used the Autumn Assembly at Malvern in November for a 'face-to-face' meeting. The next teleconference is scheduled for 8 February 2000. If you have any issues that could be of common interest to the Region III Chapters, please contact your national Chapter President.

Terje Fossnes
NORSEC member and INCOSE Region III Director of Academia and Government in Europe

Editor's Note

I have to mention that in the last Newsletter which covered INCOSE 99, reference to the INCOSE Report concerning the design of Pharaoh Kufu's Horizon Project (his pyramid) was attributed to Patrick Moore - not the Chief Architect, none other than Hemon himself. This individual, not the Chief Architect, who is the lowest form of life "what crawls from under a palas's (donkey's) dungheap" not only got his name mentioned instead of the S. E. Architect - alias the esteemed Hitchins - but he also got the report wrong. The Chief Architect's swiping reference to scribe Graham Hancock who fancies that angles and the magic (were invented at pyramid time, all got missed from the Report. It should have read:

"He doesn't seem to realise that nobody had invented angles yet. That scribe Graham Hancock has a lot to answer for - him and his magic number (. Rubbish I (the Chief Architect) know nothing about any (. Even the edible sort has yet to be invented. Doesn't scribe Hancock realise that we are Neolithic primates? I sort everything out using simple proportions - height to width. And that's another thing - Khufu wants his pyramid to be steeper than our father Senefru's Red Pyramid. Dad's was 17:18 which, I must admit, looks a bit dumpy. I was thinking of 7:5 until I worked out how much stone that would take."

Lowest form of life etc., Patrick Moore, only claims his head was full of celestial thoughts in his secret mission, for the Chief Architect, to find the Arurum for the Ben Ben Stone on which Bennu stands. He was following a possible lead for a new prospecting gold site in Sukari. Patrick explained to me that this is the gold for the top of the pyramid that the sacred bird Bennu sat on - now you know. You might like to know that Patrick swore me to secrecy not to tell anyone that the esteemed Hitchins is to visit the Nile in the near future to do more research and to make pictures! Presumably to get his true numinous story right this time. Patrick, the lowest form etc., wanted me to say how he apologies to the all seeing and esteemed Chief Architect, but I won't.

Taking the Pain Out of Membership Renewals

Matt Chittick, our Treasurer, has made arrangements with our bank to set up a Direct Debit facility. In the Spring we will be circulating details of the arrangements, to synchronise with the renewal requests. Using Direct Debits minimises our overhead costs for collecting dues, which means that more of our funds are available to support INCOSE activities. It also saves you the bother of having to write out a cheque and send it to us, and

ensures that your membership does not lapse, and so you continue to receive Insight and the SE Journal.

I hope that many of you will take advantage of this new service.

Pete Lister

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Chairman of the SEPDC (Technical issues and queries)

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Chairman of the CMC (Communication issues within and outside INCOSE UK and membership strategy)

James Kirby DERA
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Opportunities for experienced Systems Engineers

Who are Quintec?

A Systems Engineering Consultancy founded in 1989 to meet the growing demand for high integrity technical support to the UK MoD and industry. More information on Quintec can be found at our web site: www.quintec.com



Quintec®

Systems Engineering Consultants

What does Quintec do?

Systems Engineering, Analysis, Integration and Management. We aim to become the most highly respected Systems Engineering consultancy in Europe, capable of taking the highest practical level of system design responsibility and authority when specifying and co-ordinating the development of complex real-time systems.

Who are Quintec looking for?

Systems Engineers with experience in all phases of the project life cycle who can apply that knowledge to the analysis, definition, synthesis, integration, trials and acceptance of systems. Qualified Systems Engineers would be expected to have a working knowledge of Systems Engineering tools and methodologies.

Our staff often work on more than one project at a time, adopting different roles within a team according to the needs of the assignment. Most important, therefore, is a flexible and open approach to the work, a willingness to develop new skills and the ability to apply existing skills within different domains.

The Quintec Culture!

Flexible and supportive, working on the premise that by meeting the needs of our staff we are better able to meet the needs of our customers. We are committed to the ongoing development of all of our staff and encourage the development of new skills through ongoing training and education. In support of this we have recently gained the Investors In People award.

What Next?

Quintec offer an excellent remuneration package and a flexible benefits package. If you are interested in finding out more, contact Ken Newland for an informal discussion, or to arrange for a visit to our Farnham or Bristol offices. Alternatively send a copy of your CV to:

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Management and
Support

Risk
Assessment

Bids and
Proposals

Training Needs
Analysis

Operational
Analysis

Integration
Studies

Trials and
Acceptance