

Welcome to **ePreview**, the INCOSE UK e-mail bulletin. **ePreview** covers topical news and events that are of interest to the UK Systems Engineering community, complementing our Quarterly Newsletter **Preview**.
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INCOSE UK NEWS

First Railway Systems Engineering Workshop, London, 7 July 2009

Over the space of 3 years, the INCOSE UK Rail Interest Group has run a programme of more than a dozen presentations, mostly in the evenings. On 7 July we upped our game and ran our first whole-day event. London Underground kindly made their facilities on the top floor of their super art deco headquarters at 55 Broadway available to us, allowing participants to discuss Systems Engineering (SE) while enjoying views of Westminster from the adjoining roof terraces. The weather tried to interfere by brewing up strong winds but it just added to the high-energy atmosphere.

We had a full house: 70 participants, including 10 from ProRail in the Netherlands, as a result of contacts made at last year's International Symposium in Utrecht. In fact we sold out within three days of opening bookings and if there was one regret it was having to turn people away. Still, it is clearly a strong basis to build on next time.

David Waboso, LU's Director of Line Upgrades, set the workshop off to a great start, making clear just how important SE's role was in responding to the challenges that his organisation faces.

The workshop tackled three questions of critical importance to Rail Systems Engineering. In each session a number of presentations by practitioners active in the field were followed by an open discussion. The atmosphere remained solidly constructive throughout, with participants both willing both to share their experiences and ideas and open to learning from others.



The first question was, "How should we apply SE principles in the rail environment?" David Clarke from the Department for Transport shared DfT's emerging thoughts on taking a whole-of-life, whole-of-systems approach to delivering what the nation wants from its railways. Kuldeep Gharatya and Colin Wood of London Underground and Mike Stubbs of TfL described the pragmatic approach that their teams had been taking to supporting railway programmes. Miech Groeneveld provided a perspective on practice in the Netherlands with fresh ideas but still much that was familiar to the UK participants. The presentations stimulated a lively discussion. The pragmatism of rail SE was regarded as a strength but it was recognised that introducing SE into an organisation in stages created problems as well as solving them. Those with experience of SE in other sectors stressed that the issues faced in rail were fundamentally the same as those faced elsewhere, even if they did have a particular rail flavour.

After lunch, we moved on the next question, "How should we write SE into contracts?" Kuldeep Gharatya returned to the podium to describe LU experience and Erik Elich of Monto highlighted four paradoxes of writing SE into contracts and offered some partial solutions to them. The trends for the more advanced customers to do more SE themselves, before and after letting contracts, and to use SE and contracts to eliminate risk, rather than just transferring it, were warmly welcomed.

Finally, the workshop turned to the question, "How do we find enough rail systems people?" Richard Beasley of Rolls Royce provided a non-rail perspective while Brian Halliday of Network Rail and Alun Jones of Atkins described how two rail organisations were tackling the problem. It was striking how much they had in common. All three made clear that we were asking the wrong question. We should be asking, "How do we build an SE capability?" This is matter of getting the right people *and* the right tools *and* the right processes. There was general agreement that we need to promote systems thinking within other discipline as well as finding specialist systems engineers.



One specialist but critical area where the participants thought that INCOSE might be able to help was in helping rail organisations converge on a common systems architectural framework. Anyone interested in contributing to work in this area is invited to contact Colin Wood (Colin.Wood@MetronetRail.com).

As the workshop drew to a close, the atmosphere became literally electric with lightning playing around the top of the building, so the post-workshop barbecue had to be cooked indoors. It tasted just as good, though, and, when I left, there were still much animated discussion of railway SE over kebabs and beer.

The Rail Interest Group will surely be doing this again in 2010 and with the confidence next time to book a larger venue.

Bruce Elliott
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Presentations from the First Railway Systems Engineering Workshop can be downloaded from <http://www.incoseonline.org.uk>.

Autumn Assembly 2009

The next UK Chapter national event will be the 2009 Autumn Assembly (including the Chapter AGM), on 26-27 October at the Scarman Conference Centre on the Warwick University Campus.

The Autumn Assembly is traditionally our premier technical event with a focus on cutting edge SE issues and master class workshops, and 2009 will be no exception. The attached flyer gives more details of the event theme, venue and pricing.



To ensure that all delegates can take part in the discussions and workshops at the event registration numbers will be limited, as will attendance at some of the sessions. A full event programme and registration will be available from September. So make sure you put this event in your diary now, start thinking about funding and permission to attend and book early to avoid missing out.

For more information visit <http://www.incoseonline.org.uk>.

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Cognitive Systems Engineering 5-Day course and workshop in London over 2 - 6 November, 2009

Presented by Dr. Gavan Lintern

Full course schedule [here](#) | Brochure [here](#) | Registration Form [here](#)

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Capability Working Group

Further to the calling notice sent on 15 June 2009 about the Capability Working Group (WG), the inaugural meeting of the group will be held on the afternoon of 16 September 2009. The meeting will be held at the University of the West of England in North Bristol (just off the M4 / M5). Those who are interested in attending but haven't already expressed an interest in the WG should contact Peter Lister at pete.lister@incose.org. Full details of the meeting will be published in a few weeks time.



NATS join UKAB

UK Board is pleased to announce that NATS Ltd is now a member of UKAB having recently signed the Memoranda of Understanding.

OPPORTUNITIES

Wanted Interim Senior Systems Engineer – Computer Forensics

INCOSE UK has been asked to make its members aware of a job opportunity. An established and respected US computer forensics business will have a number of requirements for Interim Systems Engineers to undertake litigation support and data recovery work in the UK for their international Banking and Insurance clients during 2009 and beyond.

In most cases, the demand for support will require a quick turnaround and will start with minimal notice; typically, assignments will last between 1-3 months, though at times assignments may be measured in days.

Our client will be providing full computer forensic training, though some knowledge of this sector would be advantageous.

Assignment Specifics

- London based, with the possibility of travel throughout the UK and Europe
- Computer forensic training will take place in advance of the first assignment
- Day rate circa £250-350 per day based on experience (exclusive of VAT and receipt backed expenses)
- Closing date 21 August 2009

For the full job advert [please click here](#).

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Author: Andy Gurd, IBM

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EVENTS DIARY

Future Events

| Date/Time | Organisation & Location | Description |
|--|--|---|
| 26/10/2009 - 27/10/2009 2 full days | UK Chapter Scarman Training and Conference Centre, Warwick Conferences, University of Warwick, Coventry CV4 7AL | Autumn Assembly 2009 (AA09) Approaching New Horizons in a Systems World The INCOSE UK 2009 Autumn Assembly will focus on the role of Systems Engineering in an increasingly "Systems World", with sessions on: <ul style="list-style-type: none"> • Demystifying some of the current initiatives which are addressing systems problems • Introducing powerful techniques we can use to work together on systems problems Revisiting some of the fundamentals of Systems Engineering and looking at how they deal with the issues of the modern systems world The event has something for both Experienced Systems Professionals who want to understand better how Systems Engineering fits into an integrated approach, and those new to Systems Engineering who want to learn about new techniques, or understand some of the fundamentals and how to apply them. |
| 01/12/2009 - 01/12/2009 14:00 - 17:30 | Scottish Local Group University of Edinburgh Business School | How to manage and deal with the human behavioural aspects in your role as Systems Engineer to ensure success Hermine Schnetler in collaboration with Edinburgh University |
| 25/02/2010 - 25/02/2010 All Day | INCOSE Associates MoD Boscombe Down, Salisbury SP4 0JF | Royal Aeronautical Society's Weapon System Integrity vs Interoperability Conference There is a common perception that a conflict exists between weapon system integrity and interoperability. Is this true or are there opportunities for ensuring that surety and risks can be balanced to achieve interoperability? Areas where this is a major issue include ISTAR, Directed Energy Weapons, and Spacebased Systems. In order to address this question, a one-day unclassified conference is being organised by the Royal Aeronautical Society's Weapon Systems and Technology Group in conjunction with QinetiQ at Boscombe Down. Papers are invited to discuss the issues associated with balancing these apparently divergent requirements. |

For more details visit the events page at www.incoseonline.org.uk

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