



## INCOSE UK Chapter Rail Interest Group

# Railway Systems Engineering in a Tough Economic Climate

22nd June 2010

4 Hamilton Place, London W1J 7BQ

In the current economic climate, we all have to find ways of doing more for less. The organisations that we work for are looking for value from all of the activities they spend time and money on. Railway Systems Engineering is no exception: it must contribute to these goals and show that it is doing so while constantly improving its own practices. This workshop will:

- explore some of the reasons to suggest that Systems Engineering is an indispensable component of the future of rail;
- review case studies where Systems Engineering has delivered tangible business benefits, and then
- look at how we are learning to do Systems Engineering more efficiently and effectively.

The workshop will adopt the same format as previous INCOSE Rail Group events, with short presentations by practitioners active in the field describing current Systems Engineering activities combined with balanced reflections on their effectiveness. The day-long event will allow several perspectives on the role and value of Systems Engineering and discussion on the topics listed above.

There will be opportunities for networking throughout the day and a further opportunity for participants to talk informally over drinks after the workshop.

The venue, No 4 Hamilton Place, is the home of the Royal Aeronautical Society. It offers modern conferencing facilities within an elegant Edwardian building, just a stone's throw from Hyde Park.

### The presentations will include:

- **Keynote introduction**, Tony Mercado, Director Rail Technical & Professional, DfT Rail Group
- **Systems Engineering - a UK plc Perspective**, Terry Hill, Global Market Leader for Transport, Arup
- **Enabling innovation in the GB rail sector: A systems approach**, Charles Boulton, Arthur D. Little Ltd
- **From business requirements to system performance requirements by railway engineering simulations**, Catherine Norris, Systems Modelling Delivery Manager, London Underground
- **Project Evergreen 3: Private sector specification and delivery of enhancement**, Richard Harper, Strategic Development Manager and Stephen Barker, Infrastructure Interface Manager, Chiltern Railways
- **The application of discrete event simulations to railways - case study: modelling a rolling stock maintenance depot**, Gabriel Smith, Systems Performance Integration Manager, London Underground
- **Systems engineering a modular signalling solution**, Richard Inglis, Invensys Rail
- **Delivering economic and efficient system engineering**, Andy Bourne, Engineering Manager (Train Systems), Tube Lines
- **A Thameslink programme case study: making the benefits of Systems Engineering visible**, Derek Price, Principal Programme Engineer (Systems Engineering), Network Rail

**We invite all those with an interest in rail systems engineering and what it can deliver to listen and contribute to the discussion on this important topic.**

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### Registration is open now.

The registration fee for the event is £155 for INCOSE members and £180 for non-members. The fee includes lunch and refreshments. Participants can also purchase a ticket for a light meal at the networking event after the workshop for £25. All prices include VAT.

The event registration will be managed for INCOSE UK by Dot The Eye Ltd. To register for the event visit our online registration facility at [www.incoseonline.org.uk](http://www.incoseonline.org.uk). Here you can register for the event and pay by card through a secure payment facility.

If you are unable to take advantage of our on-line registration facilities, please contact Dot The Eye Ltd by email at [enquiries@incoseonline.org.uk](mailto:enquiries@incoseonline.org.uk), by telephone on +44 (0)1460 298217 or fax on +44 (0)845 280 5304.

Discounts are available for full-time students and for four or more bookings made at the same time; please contact Dot-The-Eye for details

### Technical Committee

The technical committee for the event comprises:

- **Tim Armitage**, Associate Director, Arup
- **Bruce Elliott**, Director, Arbutus Technical Consulting
- **Kuldeep Gharatya**, Head of Systems Integration, London Underground
- **Dr Clive Roberts**, University of Birmingham

If you have any questions about aspects of the workshop other than registration, please contact the RIG Chair, Bruce Elliott, at [bruce.elliott@arbutus-tc.co.uk](mailto:bruce.elliott@arbutus-tc.co.uk) or on +44 (0)7970 694043.



### If you are interested in the theme of this event why not also consider ... ?

The UK Annual Systems Engineering Conference on 8th – 10th November 2010 at The Crowne Plaza Oxford - Heythrop Park, Oxfordshire. The theme of this event is "Systems Engineering: Adding Value in Challenging Times". Keynote speakers for this event will be Professor Brian Collins Chief Scientific Advisor for the Department of Transport and Mr Peter Price Director of E & T, Civil Aerospace, and Rolls Royce. More details of the event programme and content can be found at [www.incoseonline.org.uk](http://www.incoseonline.org.uk)

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