

Systems Engineering Practices that Help Manage the Complexity of a Modern Railway Project

1700H for 1730H, Wednesday 27th February 2008

4th Floor, 15 Bonhill Street, London EC2A 4DN

The London Overground East London Line Project (ELLP) will extend an existing London Underground line to form a new metro-type railway linking to the North London Line and with National Rail services to the south of the River Thames. The new East London Railway (ELR) will conform to UK National Rail Standards and form part of Transport for London's (TfL's) London Overground network. Phase 1 of the ELLP is due to complete in 2010; in good time for the 2012 London Olympic and Paralympic Games. The project has completed the initial requirements definition and high level product specification and has awarded contracts for the supply of new passenger rolling stock and for the main infrastructure works. The Project is the main part of TfL's investment of £1.4billion in London Overground.

The East London Line Project (ELLP) has many areas of complexity both organisationally and technically and is using systems engineering practices to address the challenges that arise. At this event representatives of the Integrated Project Team will describe a number of methods, some being used in this application area for the first time, that are helping them manage the complexity, including a structured system decomposition, a multilevel engineering project lifecycle, a robust management system for technical requirements and interfaces, a progressive approach to systems assurance and the introduction of robust configuration management practices in a practical and pragmatic manner.

The meeting is being hosted by London Overground and will take place in their office at 15 Bonhill Street, London EC2A 4DN. Non-members are welcome and there is no charge for attendance but places must be booked in advance as the venue is restricted. To book, obtain directions or for any other questions, please contact the RIG Chair, Bruce Elliott (bruce.elliott@arbutus-tc.co.uk) or +44 (0)7970 694043.

The International Council on Systems Engineering (INCOSE) is an international professional society for systems engineers whose mission is to foster the definition, understanding, and practice of world-class systems engineering in industry, academia, and government. INCOSE was formed in 1992 to develop, nurture, and enhance the interdisciplinary approach and means to enable the realization of successful systems. Since then, INCOSE has grown dramatically. Today there are over 5,000 member systems engineers, 50 chartered chapters worldwide, and more than 40 Corporate Advisory Board members from government, industry, and academia.

The INCOSE UK Rail Interest Group has been formed:

- *To provide a forum for those interested in Systems Engineering in rail to network in a less formal environment, to exchange good practice and to provide mutual support in an area which can require some sustained perseverance;*
- *To promote, improve and share the practice of Systems Engineering within the rail industry;*
- *To foster connections with other professional bodies within rail and thereby promote cross fertilisation of knowledge and experience across sectors and community disciplines; and*
- *To promote awareness of INCOSE UK and encourage membership within the rail industry.*

For further information, see <http://www.incose.org.uk/rig.htm>.