INCOSE UK Chapter
Rail Interest Group

Requirements Capture, Analysis & Specification using UML/SysML

Michelle Ellis, Westinghouse Rail Systems Ltd

1700H for 1730H, Wednesday 8th April 2009, London

It is often difficult to gain an overall appreciation of the problem definition, or indeed one's own solution, from routine and often meaningless lists, so Michelle has tried to promote the benefits of using UML and SysML to graphically represent requirements. Until recently, Michelle had only seen these languages used for articulating software specifications or safety requirements.

However, since joining the rail industry, she has been immersed and indoctrinated in these languages, seeing at first-hand their strengths and weaknesses for articulating system requirements. Michelle has been using UML and SysML as part of her day job for almost a year now. During this time, she has managed to embed these languages into normal working practices, ranging from providing a coherent description of operational behaviour required by the customer to describing stakeholder relationships and processes. This presentation will describe some of her experiences of using the languages to capture customer requirements and will cover what she believes to be the real benefits for systems engineers involved in these activities.

Put simply what she would like to do is try to inspire you to give it a go! If, like Michelle you have doubts and believe these languages are only applicable to software engineers or those heavily involved in detailed design then think again – Be brave, 'parlez-vous' UML/SysML?

The meeting will take place at Finmeccanica's offices in 39 Victoria Street, London SW1H 0EU.Non-members are welcome and there is no charge for attendance but places must be booked in advance. To book, obtain directions or for any other questions, please contact the RIG Chair, Bruce Elliott at bruce.elliott@arbutus-tc.co.uk or on +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 www.incoseonline.org.uk and click on the 'Groups' tab.