The Transportation Working Group invites You to the

26th annual INCOSE international symposium

Edinburgh, UK
July 18 - 21, 2016

Saturday, July 16 and Sunday, July 17

All Day  Systems Engineering Tutorials throughout weekend; topics include:
Architecting SoS; Building SE Business Case; Integrating Agile Development;
Systems Resilience Fundamentals; SE Trade-Off Analyses

Corporate Advisory Board Meetings (CAB representatives only)

Sunday  Join TWG members for evening drinks and networking
1600-1830  Thomson's Bar - 182-184 Haymarket Terrace, Edinburgh EH3 8EB

Monday, July 18

1330-1445  Selling Systems Engineering by Searching for the Sweet Spot (Richard Beasley and Anne O’Neil)

1530-1655  Transportation Roundtable Part 1: Unravelling complexity: how transportation is
tackling systems issues in multi-project, multi-contract deliveries
(Meg Downing – Highways England, Derek Price – Network Rail Infrastructure Projects,
Nick Facchina – Sydney Trains, Andrew Hunter – Thales)

Tuesday, July 19

0800-0930  Keynote: Energy as a System
Prof John Loughhead, Chief Scientific Advisor, Department of Energy and Climate Change, UK

1000-1210  Transportation Panel: Verification and Validation Applications and Limitations
in Civil Infrastructure Projects - The Case of US and European High Speed Rail Projects
(Alain Kouassi, Oliver Hoehne, Nita Rabadia - HS2, Marco Ferrogalini - Bombardier and Matthew Hause)

1330-1410  Case Study: A Model Based Systems Engineering (MBSE) Framework
for Characterising Transportation Systems Over the Full Life Cycle
(William Scott, Gary Arabian - TfNSW, Richard Fullalove - TfNSW and Peter Campbell)

1415-1455  Developing and implementing systems engineering and project management processes at CSIT - a
small Canadian company in public transportation (Claude Laporte, Nicolas Tremblay, Jamil Menaceur and Denis Poliquin)

1530-1610  UK Railway System Performance – Gaining Insight Through Systematic Analysis and
Modelling (Bradley Hyland, Amir Toossi, Nigel Best, Amy Bradford: Network Rail)

1615-1655  Impact of System Integration on Reliability and Maintainability (James Armstrong)

Panel: Developing Junior SEs - a global comparison of different approaches in different sectors
(Duncan Kemp; Clive Roberts, Charles Critchett, Meaghan O’Neil Dale Brown)

or

Panel: A framework for integrating reliability and systems engineering:
proof-of-concept experiences (Hossein Hosseini and Torgeir Welo)

Evening

Transportation Working Group Dinner - Join us for networking with colleagues over dinner
at A Room in the West End. RSVP required to Sue Fursey, Sue.Fursey@hs2.org.uk
Wednesday, July 20

0800-0930  **Keynote:** Smart Cities  
*Julie Alexander, Director for Urban Development, Siemens*

1045-1125  The future of systems integration within civil infrastructure: A review and directions for research *(Jennifer Whyte)*

1330-1455  **Panel:** Systems integration in civil infrastructure *(Jennifer Whyte)*  
**Panel:** Making SE happen in your organization: the Learning Journey *(Tim Ferris; Richard Beasley, Alice Squires, Hillary Sillitto, Andy Bourne (TfL LUL), Anne O’Neil)*


Evening  **INCOSE Conference Banquet**

Thursday, July 21

1000-1210  **TWG Working Session**  
Join your TWG colleagues for a working session to contribute to IS2017 preparation and advance working group objectives.

Friday, July 22

**INCOSE Technical tour – Forth Replacement Crossing.**  
The Forth Replacement Crossing is Scotland’s biggest transport infrastructure project in a generation and is on track to be completed in 2016. This major project is delivering a new modern road bridge, upgrading the road infrastructure on both sides of the Firth of Forth, and represents a true systems response to the problems posed by the deterioration of the old road bridge and greater demands for travel capacity.  
*Please check the symposium website (www.incose.org/symp2016) for additional registration details: space limited.*

**Anticipated Participating Organizations**

For more information contact Transportation Working Group Co-chairs:  
Dale Brown, Dale.Brown@atkinsglobal.com - Nita Rabadia, nitarabadia@hotmail.com  
Simon Smith, simon.smith@IBIGroup.com  
or Transportation Industry Ambassadors  
Anne O’Neil, anneconeil@gmail.com - Lilanthi Balasingham, BalasinghamL@pbworld.com