The Transportation Working Group invites **You** to the

27th annual **INCOSE** international symposium

Adelaide, Australia
July 15 - 20, 2017

ENGINEERS AUSTRALIA
SESA

Transportation Program Highlights

Saturday, July 15

All Day **Systems Engineering Tutorials and Panels:**
Capability SE Design, SE for Mostly Software SoS , MBSE sessions throughout Saturday

Corporate Advisory Board Meetings *(CAB representatives only)*

Sunday, July 16

All Day **Systems Engineering Tutorials and Panels:**
ISO 42020 Architecture Processes, Best Practices of Systems of Systems Engineering, Generalist SE Tutorial: How SE Works, Systems Security Engineering: Overview and Concepts

Evening **Welcome Reception for Automotive delegates.** *Join automotive and ground transportation colleagues for welcome reception during happy hour at a local establishment.*
RSVP for details: Allison Ruggiero, allison.ruggiero@nyct.com

Monday, July 17

15:30-16:10 **Using an Agent-Based Simulation to Evaluate the Performance of Control Algorithms for an Intelligent Traffic System**
John Panek

16:15-16:55 **Developing an Operational Concept Framework to support government policy and regulation on Connected Autonomous Vehicles.**
Richard Fullalove, *Transport for New South Wales*

or

15:30-1730 **Implementing Model-Based Conceptual Design in Transport – Practices, challenges and opportunities**
Sin Hin Oh, *Singapore LTA*;
Eric Burgers, *Dutch Transport*

Tuesday, July 18

08:00-09:30 **Tuesday Keynote**
Dr Tomohiko Taniguchi *(Special adviser to the cabinet of Prime Minister Shinzo Abe)*

13:30-14:55
&
15:30-17:30 **Joint Automotive & Transportation Industry Roundtable: Connected and Automated Vehicles – Are we Kangaroos in the headlights?**
Opening remarks from Hon. Stephen Mullighan, *SA Minister for Transport and Infastructure*; Craig Moran, Roads and Maritime Services, *Govt. of New South Wales*; Marcus Burke, *Australian National Transport Commission*; Niels De Boer, *CETRAN, Centre of Excellence for Testing & Research of Autonomous Vehicles at Nanyang Technological University*; Carla Bailo, *Mobility Research, Ohio State University*; Prof. Göran Roos, *Economic Development Board of South Australia*; Carl Liersch, *Robert Bosch Australia Pty Ltd*; Robert Nilsson, *Volvo Car Corporation*

Evening **Joint Automotive and Transportation Dinner** - *Enjoy informal networking with industry colleagues at a restaurant near the Convention Center.*
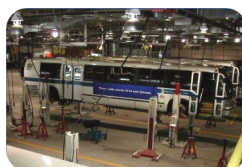*Must RSVP to attend:* Allison Ruggiero, allison.ruggiero@nyct.com

Wednesday, July 19

08:00-09:30 **Wednesday plenary - Systems Engineering and Autonomy: Opportunities and Challenges**
Paul Nielsen *(Director & CEO - Software Engineering Institute, Carnegie Mellon University)*

27th annual INCOSE international symposium

Adelaide, Australia
July 15 - 20, 2017

ENGINEERS AUSTRALIA
SESA

Tranportation Program Highlights

Wednesday, July 19

10:00-10:40 — Your Wish, My Command – Speeding up Projects in the Transportation Industry Using Ontologies
Hugo Guillermo Chalé Gongora, Juan Llorens and Elena Gallego

or

Improving Integration: Thinking Beyond the Physical Architecture
James Armstrong

10:45-11:25 — Applying Systems Engineering Concepts to Rail and Transit Design-Build Infrastructure Projects
Timothy Stokes - *Based on Denver RTD projects.*

11:30-12:10 — Realizing the Value of Systems Engineering
Richard Beasley

or

Foundations for Improved Integration - Using Systems Engineering in Programme and Project Management
Andrew Gray, Helen Nasser, Ken Richardson and Kate Rooke

13:30-14:10 — The Organisation's Transportation Architecture Framework
Gary Arabian and Edward Chan, *Transport for NSW*

14:15-14:55 — System Engineering Analysis of Construction Equipment Operation in the Latin America
Kurt Azevedo and Daniel Olsen

or

13:30-14:55
Systems Engineering and Asset Management – two sides of the same coin?
Duncan Kemp, *UK Ministry Of Defence;* Ian Gibson, *Jacobs;* Paul Gibbons, *CH2M*

15:30-17:30 — Transportation Industry Roundtable: Deploying SE-based Asset Management - organizational capability development case studies
Andy Nicol, *Moderator*; Michael Salvato, *NY MTA*; William Gleckler, *MTA NYCT*; Grant Burton, *Sydney Trains*; Tom Sargant, *PTV*

Evening — INCOSE Symposium Banquet

Thursday, July 20

08:00-09:25 — Role of Systems Engineers in Engineering Resilience
Greg Parnell, Scott Jackson, Tim Ferris and Ed Pohl

or

Deploying Digital Technology to Legacy Environments
William Palazzi; Moderator; Warwick Talbot, *Sydney Trains;* Bradley Moorhouse, *ARTC;* Len Neist, *PTV;* Simon Foster, *ONRSR*

Anticipated Participating Organizations

ARTC hs2 Land Transport Authority We Keep Your World *Moving* MTA New York City Transit NSW GOVERNMENT Transport for NSW NSW GOVERNMENT Transport Roads & Maritime Services

national rail safety regulator NTC AUSTRALIA National Transport Commission ProRail PUBLIC TRANSPORT VICTORIA PT> SOUTH AUSTRALIA Transport Sydney Trains

For more information contact Transportation Working Group Co-chairs:
Dale Brown, *brownd1@pbworld.com* - Nita Rabadia, *nitarabadia@hotmail.com*
Simon Smith, *simon.smith@ttamcl.com*
or Transportation Industry Ambassadors
Anne O'Neil, *anneconeil@gmail.com* - Lilanthi Balasingham, *BalasinghamL@pbworld.com*