IS2017 Schedule

Saturday at IS 2017

Start time	End time		Track 1 (Riverbank 5)	Track 2 (Riverbank 4)	Track 3 (Riverbank 3)	Track 4 (Riverbank 2)
08:00	09:30	Session A		Tutorial A.2: An practical introduction to Capability Systems Engineering: Designing Hyperloop, a new 800 mph ground transportation capability Duncan Kemp (Ministry of Defence); Sam Williams (MoD)	Tutorial A.3: Best Practice Meets Invisible Force: Systems Engineering for Mostly-Software Systems of Systems Sarah Sheard (Software Engineering Institute)	Tutorial A.4: Producing The Big Idea with Almost No Bodies Angela Robinson (INCOSE VSE Working Group)
09:30	10:00	Break (Foyer)				
10:00	12:00	Session B				
12:00	13:30	Lunch (Hall N)				
13:30	15:00	Session C				Tutorial C.4: Bridging the Gap between Systems Engineering and Program Scheduling Elizabeth Clark (Software Metrics Inc); Angela Tuffley (RedBay Consulting Pty Ltd); Shari Soutberg (University of New South Wales - Capability Systems Centre)
15:00	15:30	Break (Foyer)				
15:30	17:00	Session D				
19:00	22:00		**Corporate Advisory Board Dinner (By invitation only)**			

Sunday at IS 2017

Start time	End time		Track 1 (Riverbank 5)	Track 2 (Riverbank 4)	Track 3 (Riverbank 3)	Track 4 (Riverbank 2)	Track 5 (Riverbank 1)
08:00	09:30	Session E		IS17 Systems Summit on Critical-Problem Definitions Rick Dove	Tutorial E.3: ISO 42020 - Architecture Processes Anand Kumar (Tata Research Development and Design Centre); James Martin (Aerospace Corporation); Jean-Luc Garnier (Thales Corporation)	Tutorial E.4: Best Practices of Systems of Systems Engineering: Applying Unified Architecture Framework Aurelijus Morkevicius (No Magic Europe); Barry Papke (No Magic USA)	Tutorial E.5: What Forest? All I See are these SE Trees! Mark Powell (Attwater Consulting)
09:30	10:00	Break (Foyer)					
10:00	12:00	Session F					
12:00	13:30	Lunch (Hall N)					
13:30	15:00	Session G	Panel: Perspectives on ABET Accreditation of Systems Engineering Programs Moderator: Regina Griego (Sandia National Laboratories) Panelists: Heidi Hahn (Los Alamos National Laboratory); Tim Ferris (Cranfield University); Clifford Whitcomb (Naval Postgraduate School)				Tutorial G.5: Systems Security Engineering: Concepts and Overview Mark Winstead, Daryl Hild, Michael McEvilley (The MITRE Corporation)
15:00	15:30	Break (Foyer)					
15:30	17:00	Session H	Panel: Building a Pathway to Systems Education for All Engineers Moderator: Richard Adcock (Cranfield University) Panelists: Don Gelosh (Worcester Polytechnic Institute); Larry Strawser (Retired); Klew Williams (Worcester Polytechnic Institute); Jon Wade, Nicole Hutchison (Stevens Institute of Technology)				

IS2017 Schedule

Monday at IS 2017

Start time	End time		Track 1 (Hall L)	Track 2 (Riverbank 6)	Track 3 (Riverbank 5)	Track 4 (Riverbank 4)	Track 5 (Riverbank 3)	Track 6 (Riverbank 2)	Track 7 (Sponsors Theather)	Track 8 (Exhibitors Theater)	Track 9 (Riverbank 1)
08:00	09:30	Opening Plenary	**Force Design: Evolution not revolution - AVM Mel Hupfeld (Head of Force Design - Australian Defence)**								
09:30	**10:00**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
10:00	12:10	Session 1	MBSE	Systems of Systems	Teaching & Training	Agile SE	TechOps	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
				Judith Dahmann	*Muhammad Islam*	*Kerry Lunney*	*David Endler*	*Peggy Brouse*			
			Panel: Be It Resolved: You are Wasting Time. You Need Better Systems for Model Management and Collaboration; also, Cultural Change would Help. Moderator: Lonnie Vanzandt (Sodius) Panelists: Len Wozniak (General Motors); John Baras (University of Maryland); Bill Chown (Mentor Graphics); Manas Bajaj (Intercax)	Using the SoSE Principles Framework Jaci M Pratt (Defence Science and Technology Group); Stephen Cook (The University of Adelaide)	Version 0.75 of the Proposed INCOSE Competency Framework Don Gelosh (Worcester Polytechnic Institute); Mimi Heisey (Lockheed Martin Corporation); John Snoderly (Defense Acquisition University); Kenneth Nidiffer (Software Engineering Institute)	Defence requires Enterprise-Level Innovation: Using a Systems Approach to secure superior Value from Ideas Mike Wilkinson, Simon Jewell (Niteworks)	PM-SE Integration Working Group Tina P. Srivastava (MIT Aeronautics and Astronautics Engineering); Jean-Claude Roussel, Gary R. Smith (Airbus Group)	SE Fundamentals on Systemic Design Engineering Dr Jon Wade (Stevens Institute of Technology)			Practitioners Challenge Nicole Hutchison
				A SoS Approach for Engineering Capability Programs Stephen Cook (Shoal Engineering & University of Adelaide); Mark Unewisse (Department of Defence)	Framework for Problem Definition - A Joint Method of Design Thinking and Systems Thinking Kyoko Watanabe, Yoshikazu Tomita, Kanenori Ishibashi, Makoto Ioki, Seiko Shirasaka (Keio University Graduate School of System Design and Management)	Viable Systems Analysis of the Wardley IT Evolution Framework Joseph Bradley (Leading Change, LLC); Eric Kristoff (UMUC)	Complexity Working Group Jimmie McEver (JHU Applied Physics Laboratory)	Essentials of Architecting: Setting the Big Picture David Long (Vitech Corporation)		Thales Learning & Development (10:30-10:50) Tsinghua University - Optimising tool management systems in Rail (11:00-11:20)	
				Knowledge Based Decision Model for Architecting and Evolving Complex System-of-Systems Ramakrishnan Raman (Honeywell Technology Solutions Lab); Meenakshi D'Souza (International Institute Of Information Technology Bangalore)	Challenging Architects in Education: the Smart Environments Integration Project G.Maarten Bonnema (University of Twente)	Case Study: Agile SE Process for Centralized SoS Sustainment at Northrop Grumman Rick Dove (Paradigm Shift International); Bill Schindel (ICTT System Sciences); Mark Kenney (Northrop Grumman)	Standards Initiative Gina Guillaume-Joseph (The MITRE Corporation)	SE Fundamentals on Requirements: “I want a Tesla” Courtney Wright (INCOSE)			
12:10	**13:30**	**Lunch**	**Lunch (Exhibit Hall)**								
12:15	**13:15**		**Welcome Lunch for New Members and First-Time Delegates (RiversideBank 7-8)**								
13:30	14:55	Session 2	MBSE	Systems of Systems	Teaching & Training	Energy	TechOps	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
			Matthew Hause	*Rick Dove*	*Richard Beasley*	*Andrew Pickard*	*David Endler*	*Hervé Rochecouste*			
			MBSE Grid: A Simplified SysML-Based Approach for Modeling Complex Systems Aurelijus Morkevicius, Aiste Aleksandraviciene, Donatas Mazeika (No Magic Europe); Lina Tutkute (Kaunas University of Technology); Zilvinas Strolia (No Magic Europe)	Defining `System`: a Comprehensive Approach Hillary Sillitto (Sillitto Enterprises); Dov Dori (Technion - Israel Institute of Technology); Regina Griego (Sandia National Laboratories); Scott Jackson (Burnham Systems Consulting); Daniel Krob (President at CESAMES); Patrick Godfrey (Systems Thinking); Eileen Arnold (Retired);	The Roles of Systems Engineers Revisited Nicole Hutchison, Jon Wade (Stevens Institute of Technology)	A Context-Enabled Systems Development Method: The Case of Semi-Autonomous Remotely Operated Vehicles in an Arctic Environment Anders Roe Nykaas, Yang-Yang Zhao (University College of South-East Norway)	Decision Analysis Working Group Gregory S. Parnell (University of Arkansas); Frank Salvatore (Engility Corporation)	SE Fundamental on Integration, Verification & Validation Cecilia Haskins (NTNU)		MathWorks (13:30-13:50) Jama Software (14:00-14:20)	Practitioners Challenge Nicole Hutchison
			Graph-Based Digital Blueprint for Model Based Engineering of Complex Systems Manas Bajaj (Intercax); Jonathan Backhaus, Timothy Walden (Lockheed Martin); Manoj Waikar, Dirk Zwemer (Intercax); Chris Schreiber, Ghassan Issa (Lockheed Martin)	Evaluating Australia's most complex system-of-systems, the future submarine: A case for using new Complex Systems Governance Joseph Bradley (Leading Change, LLC); Mahmoud Efatmaneshnik, Keith Joiner (UNSW Canberra at ADFA); Charles Keating (Old Dominion University)	The U.S. Department of Defense Systems Engineering Competency Model Clifford Whitcomb, Rabia Khan (Naval Postgraduate School); Corina White (NAVAIR); Dana Grambow (Office of Personnel Management); Jose Velez (DASN RDT&E); Jessica Delgado (Naval Surface Warfare Center Dahlgran Division)	Evolving tolerance management for increased robustness of subsea installation operations Lars Petter Bryn (HSN); Gerrit Muller (Buskerud and Vestfold University College)	Oil & Gas Working Group Mia Zager, Cindy Chen (Shell Technology Center); Paul Schreinemakers (How2SE)	SE Fundamentals on System of Systems Duncan Kemp (Ministry of Defense)			
14:55	**15:30**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
15:30	16:55	Session 3	MBSE	MBCD	Teaching & Training	Energy	Smart Systems	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	
			Daniel Spencer		*Mark Eggler*	*Heinz Stoewer*	*Peter Sjoberg*	*Hervé Rochecouste*			
			An Exploration of MBSE Through the Modelling of the S2TEP Space System Michael Kretzenbacher (Institut Sup); Caroline Lange (German Aerospace Center (DLR)); David Harvey (Shoal)	Panel: Implementing Model-Based Conceptual Design in transport - Practices, challenges and opportunities Moderator: David Harvey (Shoal Engineering) Panelists: Sin Hin Oh (Land Transport Authority, Singapore); Eric Burgers (Independent entrepreneur); Quoc Do (Frazer Nash Consultancy); Shaun Wilson (Shoal Engineering); Ronald Kratzke (Vitech Corporation) End 17:30	Alternate Reality Games in the Systems Engineering Classroom Klew Williams, Alexandrina Agloro, Shamsnaz S. Virani (Worcester Polytechnic Institute)	Cause and Impact Analysis of Cost and Schedule Overruns in Subsea Oil and Gas Projects - A Supplier's Perspective Simen Bergli, Kristin Falk (University College of Southeast Norway (NISE))	Using an Agent-Based Simulation to Evaluate the Performance of Control Algorithms for an Intelligent Traffic Light System John Panek (Northrop Grumman Corporation)	SE Fundamentals on Systems Thinking: Systems thinking – inspiring success Prof Patrick Godfrey (Systems Thinking)			
			Toward Systems Engineering Modeling Standards: Proposed System Architecture Core Model Elements and Composition Robert Malone, John Herrold, Brittany Friedland, Gregory Green (Boeing)		SE Simulation Experience Design: A Case Study Richard Turner (Stevens Institute); Doug Bodner (Goergia Institute of Technology); Duncan Kemp (UK Ministry of Defence); Yvette Rodriguez (Defense Acquisition University); Jon Wade, Peizhu Zhang (Stevens Institute)	Applying A3 reports for early validation and optimization of stakeholder communication in development projects Kristian Frøvold (KM); Gerrit Muller (Buskerud and Vestfold University College); Michael Pennotti (Stevens Institute of Technology)	Developing an Operational Concept Framework to support government policy and regulation on Connected Autonomous Vehicles Richard Fullalove (Transport for NSW)	SE Fundamentals on Portfolio, Program, and Project Management (P3M) Dr. Tina Srivastava (Gigavation & MIT)		Tom Sawyer Software (16:30-16:50)	
17:00	18:00		**Working Group Sessions**								
18:00	19:30		**Ice Breaker Reception (Exhibit Hall)**								

IS2017 Schedule

Tuesday at IS 2017

Start time	End time	Activity	Track 1 (Hall L)	Track 2 (Riverbank 6)	Track 3 (Riverbank 5)	Track 4 (Riverbank 4)	Track 5 (Riverbank 3)	Track 6 (Riverbank 2)	Track 7 (Sponsors Theather)	Track 8 (Exhibitors Theater)	Track 9 (Riverbank 1)
08:00	09:30	Tuesday Plenary	**The Japanese Bullet Train 'Shinkansen' System: Its Genesis and Safety Assurance - Dr Tomohiko Taniguchi (Special adviser to the cabinet of Prime Minister Shinzo AbeProfessor at Keio University Graduate School of System Design and Management)**								
09:30	**10:00**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
10:00	12:10	Session 4	MBSE	Requirements	Systems Science	System Safety	Product-line Engineering	Key Reserve Papers: Architecture	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
			Kerry Lunney	*Lena Johnasson*		*Angela Robinson*	*Jean-Claude Roussel*	*Gina Guillaume-Joseph*			
			Exploring the Cyber-Physical Design Space Carl Gamble, John Fitzgerald (Newcastle University); Richard Payne, Benjamin Lam (Newcastle Univeristy)	Modeling Legal Requirements Christian Webel (Fraunhofer IESE); Rainer Steglich (N.A.)	Panel: Exploring the Frontiers of Systems Science: Establishing a Foundation for SE Practice Moderator: James Martin (The Aerospace Corporation) Panelists: Stephen Cook (University of Adelaide); Tim Ferris (Cranfield University); Anand Kumar (Tata Consultancy Services); David Rousseau (Pres, Intl Soc Sys Sci); Rick Dove (Paradigm Shift Intl)	System Theoretic Safety Analysis of the Sewol-Ho Ferry Accident in South Korea Yisug Kwon (UTC); Nancy Leveson (MIT)	Where the big bucks (will) come from - Implementing Product Line Engineering for Railway Rolling Stock Hugo Guillermo Chalé (ALSTOM Transport); Francois Greugny (Acuity Solutinos)	Modeling system modes, states, configurations with Arcadia and Capella: method and tool perspectives Stephane Bonnet, Jean-Luc Voirin, V Normand, Daniel Exertier (Thales) Crafting a Collaboration Space for the Conceptualization of a Collaborative Engineering Service for the Management of Modeled Engineering Artifacts throughout their Enterprise Lifecycle Lonnie Vanzandt (Predictable Response Consulting)	Tom Sawyer Software (10:00-10:20) Mentor (11:00-11:20)	Sparx Systems (10:00-10:20) No Magic (10:30-10:50) The REUSE Company (11:00-11:20)	Practitioners Challenge Nicole Hutchison
			The Application of MBSE to Inform Workforce Decision Making Thomas Bransden, Quoc Do, Damien Farrell, Stuart Taylor (Frazer-Nash Consultancy Ltd)	Systems Security Engineering: What Every System Engineer Needs to Know Perri Nejib (Northrop Grumman); Dawn Beyer (Lockheed Martin); Ed Yakabovicz (Northrop Grumman); Ken Kepchar (Eagleview Associates); Michael Mcevilley (Mitre)		A Complexity Measure for System Safety Assurance Sarah Sheard (Software Engineering Institute); Michael Konrad, Charles Weinstock, William Nichols (SEI)	Model Based Engineering and Product Line Engineering: Combining Two Powerful Approaches at Raytheon Bobbi Young (Raytheon Company); Paul Clements (BigLever Software, Inc.)				
			An industrial example of using Enterprise Architecture to speed up systems development Peter Sjoberg (Volvo CE); Lars-Olof Kihlstr (Syntell AB); Matthew Hause (PTC)	Requirements engineering for radical innovation - Application to helicopter engine fuel system Adrien Monsimer (Safran Helicopter Engines); Jean-Charles Mar (Institut CI); Pierre Sicaire (Safran Helicopter Engines)		Semantically-enabled Model-based Systems Engineering of Safety-critical Network of Systems Leonard Petnga (Institute for Systems Research - University of Maryland); Mark Austin (University of Maryland); Mark Blackburn (Stevens Institute of Technology)	A Feature Ontology to Support Feature-Based Product Line Engineering Charles Krueger, Paul Clements (BigLever Software, Inc.)	Model-based design of an autonomous function for responsive satellite operations Toshihiro Obata, Shinichi Nakasuka (The University of Tokyo)			
12:10	**13:30**	**Lunch**	**Lunch (Exhibit Hall) - New Member Lunch (Hall N)**								
13:30	14:55	Session 5	MBSE	Requirements	Verification & Validation	Acquisition & Supply	Future Mobility	Key Reserve Papers: Systems Thinking	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
			David Long	*Bill Parkins*	*Paul Schreinemakers*	*Tommie Liddy*		*Muhammad Islam*			
			Using MBSE to Evaluate and Protect the Electrical Grid as a System of Systems Matthew Hause (PTC)	A Requirements' Eye View of Product Development Richard Beasley (Rolls-Royce plc); Andrew Pickard (Rolls-Royce Corporation); Andrew Nolan (Rolls-Royce plc)	Warranting System Validity Through a Holistic Validation Framework: A Research Agenda Jennifer Stevens (NASA)	A Model-Based Method for Design Option Evaluation of Off-the-Shelf Naval Platforms Brett Morris (Defence Science and Technology Group); Stephen Cook (The University of Adelaide)	Joint Automotive & Transportation Industry Roundtable: Connected and Automated Vehicles - Are we Kangaroos in the headlights? Lilanthi Balasingham (Parsons Brinckerhoff); Anne Oneil (Anne O'Neil Consultants LLC); Alex Ryan (MaRS Solutions Lab); Craig Moran (Roads and Maritime Services, Gvt. of NSW); Marcus Burke (Australian National Transport Commission); Niels De Boer (CETRAN); Carla Bailo (Mobility Research, Ohio State University); Mark Fusco (Advanced Focus); Carl Liersch (Robert Bosch Australia); Robert Nilsson (Volvo Car Corporation)	Systemic Design Engineering Jon Wade (SERC/Stevens Institute of Technology); Steven Hoffenson (Stevens Institute of Technology); Hortense Gerardo (Lasell College) Aditi: A Systems view of Knowledge Processes Kesav Vithal Nori (IIIT Hyderabad); Anand Kumar, Swaminathan Natarajan (TCS Research)	Defence SA (13:30-13:50) Lockheed Martin - Value Driven Solutions (14:30-14:50)	BigLever Software (14:00-14:20) Project Management Institute (14:30-14:50)	Practitioners Challenge Nicole Hutchison
			An MBSE Methodology for Capability Systems Definition Quoc Do (Frazer Nash Consult); Daniel Hartigan (Department of Defence)	System Scenario Selection Method for Faster Analysis Timothy L. Ferris, Stephen Barker (Cranfield University)	V&V - All the Way Through Dale Brown (INCOSE); Chamara Johnson (WSP-Parsons Brinckerhoff)	Towards a modular System Dynamics approach for modelling military workforce planning problems Victoria Jnitova, Sondoss Elsawah, Michael Ryan (unsw@adfa)					
14:55	**15:30**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
15:30	16:55	Session 6	Invited Panel	Architecture	Verification & Validation	Acquisition & Supply	Future Mobility	Key Reserve Papers: SE management	Sponsor Track	Exhibitor Demo Room	
				Gina Guillaume-Joseph	*Andrew Pickard*	*Terje Fossnes*		*Rachel LeBlanc*			
			The role of Design in Systems Engineering - Systems Thinking meets Design Thinking Jon Wade (Stevens Institute)	A hybrid approach for supply chain analysis: An application of network and cluster analysis Li Qiao, Michael Ryan (UNSW Canberra)	Verification of Requirements: System of Systems Theory, Framework, Formalisms, Validity Gary Langford (Portland State University)	Acquisition System Development: A Complex System Governance Perspective Charles Keating, Polinpapilinho Katina (Old Dominion University); Ra'Ed Jaradat (Mississippi State University); Joseph Bradley (Old Dominion University)	Joint Automotive & Transportation Industry Roundtable: Connected and Automated Vehicles - Are we Kangaroos in the headlights? Lilanthi Balasingham (Parsons Brinckerhoff); Anne Oneil (Anne O'Neil Consultants LLC); Alex Ryan (MaRS Solutions Lab); Craig Moran (Roads and Maritime Services, Gvt. of NSW); Marcus Burke (Australian National Transport Commission); Niels De Boer (CETRAN); Carla Bailo (Mobility Research, Ohio State University); Mark Fusco (Advanced Focus); Carl Liersch (Robert Bosch Australia); Robert Nilsson (Volvo Car Corporation) End 17:30	Improving Joint Force Integration by Design in the new Defence Capability Life Cycle Andrew Flahive (DST Group); Jakobsson (Retired, DST Group); Donald Lowe, Mark Unewisse (DST Group) Applying Design Thinking in Systems Engineering Process as an Extended Version of DIKW Model Yoshikazu Tomita, Kyoko Watanabe, Seiko Shirasaka, Takashi Maeno (Keio University)		Intercax (15:30-15:50) Vitech (16:30-16:50)	
				A Combinatorial Approach to Tradespace Exploration of Complex Systems: A CubeSat Case Study Li Qiao, Mahmoud Efatmaneshnik, Michael Ryan (UNSW Canberra)	Test Strategy to detect Industrial Control Systems common Cyber Weaknesses and Vulnerabilities Obaid Ur Rehman (UNSW Canberra); Keith Joiner (UNSW, Capabillty Systems Centre)	Use of the Goal Structuring Notation to Argue Technical Integrity Scott Simmonds (UniSA); Stephen Cook (University of Adelaide)		Multicast Routing Protocol for Energy Efficiency in Wireless Sensor Networks Anitha Jayapalan (Dayananda Sagar Academy of Technology & Management) The role of Command-and-control management and Governance in Systems Engineering Alex Gorod, Leonie Hallo, Tiep Nguyen (The University of Adelaide)			
17:00	18:00		**The Exhibitors' Reception (Exhibit Hall)**								
18:00	19:00		**Certification Reception (ASEP, CSEP, ESEP only)**								

IS2017 Schedule

Wednesday at IS 2017

Start time	End time	Activity	Track 1 (Hall L)	Track 2 (Riverbank 6)	Track 3 (Riverbank 5)	Track 4 (Riverbank 4)	Track 5 (Riverbank 3)	Track 6 (Riverbank 2)	Track 7 (Sponsors Theather)	Track 8 (Exhibitors Theater)	Track 9 (Riverbank 1)
08:00	09:30	Wednesday Plenary	**Systems Engineering and Autonomy: Opportunities and Challenges - Paul Nielsen (Director & CEO - Software Engineering Institute, Carnegie Mellon University)**								
09:30	**10:00**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
10:00	12:10	Session 7	Process	Architecture	System Integration	Human Factors	Transportation	Key Reserve Papers: Applied Systems Engineering	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
			Ken Ptack	*Paul Schreinemakers*	*Eileen Arnold*	*Serge Landry*	*Eduardo Bellon*	*Muhammad Islam*			
			Storytelling as a Key Enabler for Systems Engineering Kevin Devaney, James Johnson (SRC, Inc.)	Conceptual Data Modeling for the Functional Decomposition of Mission Capabilities Andrew Battigaglia, Erika Brimhall, Terry Ogle (Georgia Tech Research Institute)	Improving Integration: Thinking Beyond the Physical Architecture James Armstrong (Stevens Institute of Technology)	I Don't Need Requirements - I Know What I'm Doing!, Usability as a Critical Human Factor in Requirements Management Oliver Hoehne (Sr. Engineering Manager)	Your Wish, My Command - Speeding up Projects in the Transportation Industry Using Ontologies Hugo Guillermo Chalé (ALSTOM Transport); Juan Llorens (Universidad Carlos III de Madrid); Elena Gallego (The REUSE Company)	The myths and the reality of problem-solving Joseph Kasser (The Right Requirements); Yang Yang Zhao (University College of Southeast Norway)		Method Park (10:00-10:20) ModelFoundry and Object Management Group (10:30-10:50) No Magic (11:00-11:20) Frazer-Nash Consultancy (11:30-11:50)	Practitioners Challenge Nicole Hutchison
			Systems Engineering Very Small Entity Use Case Joseph Marvin, Garth Bailey (Prime Solutions Group, Incorporated)	Value based Architecture of Digital Product-Service Systems Anand Kumar, Nikhil Zope, Doji Lokku, Jose Reddypogu (TCS Research)	Architecture-Based SCMILE Service Framework for systems' integration Frank Lui, Donald Lowe, Andrew Flahive, Hossein Seif Zadeh (DST Group)	Integrating the end user perspective in technical product development: Lessons from the packaging industry Emmy Hultgren, Lena Karlsson Johansson (Tetra Pak Packaging Solutions)	Conducting a Model Based Systems Engineering Tool Trade Study Using a Systems Engineering Approach Brittany Friedland, John Herrold, Glendora Ferguson, Robert Malone (Boeing)				
			Future Proofing Process Obaid Ur Rehman, Michael Ryan, Mahmoud Efatmaneshnik (UNSW Canberra)	The Impact of Lean on the mining industry: A simulation evaluation approach Arnesh Telukdarie (University of Johannesburg); Shingai A. Maunzagona (university of johannesburg)	Foundations for improved integration - Using Systems Engineering in Programme and Project Management Andrew Gray (BMT Hi-Q Sigma Ltd.); Dr Adrian James (UCL Australia); Helen Nasser (WSP Parsons Brinkerhoff); Ken Richardson (Roke Manor Research Ltd.); Kate Rooke (PA Consulting Group)	Integrated Human Factors Views in the Unified Architecture Framework Matthew Hause (PTC)	Realizing the Value of Systems Engineering Richard Beasley (Rolls-Royce plc)	Designing inter-factory architecture for higher adaptability of manufacturing supply chain based on systems engineering Jun-Yeong Kim (GEM, POSTECH); Daegeun Hong (GEM,POSTECH); Suk-Hwan Suh (GEM, POSTECH)			
12:10	**13:30**	**Lunch**	**Lunch (Exhibit Hall)**								
13:30	14:55	Session 8	Invited Panel	Architecture	Risk & Opportunity Mamgement	Leadership	Transportation	Key Reserve Papers: Methodology	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
				Anand Kumar	*Cecilia Haskins*	*Richard Beasley*	*Helen Williams*	*Ken Zemrowski*			
			Systems Engineering and Asset Management – two sides of the same coin? Duncan Kemp (UK Ministry Of Defence); Jim Kennedy (Asset Management Group); Steve Ashfield (Nova Systems); Anne O'Neil (Anne O'Neil Consultants LLC); Eric Burgers (Semapro)	Overview of an Emerging Standard on Architecture Evaluation - ISO/IEC 42030 James Martin (Aerospace Corporation)	Innovation, Risk, Agility, and Learning, Viewed as Optimal Control & Estimation William Schindel (ICTT System Sciences)	Challenges and Opportunities for the New Generation of Systems Engineering Leaders Muhammad Islam, Gina Guillaume-Joseph, Al Wong, Subash Kafle, Deanthony Heart (MITRE)	The Transport for NSW Transport Network Architecture Model Gary Arabian, Edward Chan (Transport for NSW)	A Systematic Approach to Influencing System Security Standards Kenneth Kepchar (EagleView Associates LLC) On the Use of the Terms Verification and Validation Michael Ryan (UNSW Canberra); Louis Wheatcraft (Requirements Experts)		Capella (13:30-13:50)	Practitioners Challenge Nicole Hutchison
				The ValXplore method: exploring desirability, feasibility and viability of business and system design under uncertainty Sonia Ben Hamida (Ecole Centrale Paris); Marija Jankovic (CentraleSupelec)	Environmental Asset Management: Risk Management Systems Brian Naude, Charl Petzer (Council for Scientific and Industrial Research)	An Innovative Program to Further the Careers of Women as Leaders in Engineering Heidi Hahn (hahn@lanl.gov); Barbara Lynn (LANL)	System Engineering Analysis of Construction Equipment Operation in the Latin America Kurt Azevedo, Daniel Olsen (Colorado State University)	A Proposal for Standardized Use of the Term `Module` in Systems Engineering Mahmoud Efatmaneshnik (UNSW Canberra at ADFA); Shraga Shoval (Ariel University); Michael Ryan (UNSW-Canberra) Security Level Identification and Secure Software Design of Safety Critical Embedded Systems : Methodologies and Process Raka Mitra (Honeywell)			
14:55	**15:30**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**								
15:30	16:55	Session 9	MBSE	Systems Thinking	Resilience	Leadership	Transportation	Key Reserve Papers: MBSE	Sponsor Track	Exhibitor Demo Room	
			David Long	*Makoto Ioki*	*Muhammad Islam*			*Steve Ashfield*			
			Who's Line is it Anyway? Using MBSE in the Management and Acceptance of the Defence Lines of Development Matthew Dent (Frazer-Nash Consultancy)	Improving the Systems Thinking Skills of the Systems Architect via Aesthetic Interpretation of Art Tom McDermott (Georgia Tech Research Institute); Alejandro Salado (Virginia Tech)	Engineered Resilient Systems with Value Focused Thinking Colin Small, Gregory Parnell, Ed Pohl, Bobby Cottam, Eric Specking, Zephan Wade (University of Arkansas)	Panel: Systems Engineering Leadership: Navigational Instruments and Guides Moderator: Regina Griego (Sandia National Laboratories) Panelists: Heidi Hahn (Los Alamos National Laboratories); Lauren Stolzar (BAE Systems, Inc.); Stephanie Chiesi (Raytheon Missile Systems); Alice Squires (Washington State University)	Transportation Industry Roundtable: Deploying SE-based Asset Management - organizational capability development case studies Anne O'Neil (Anne O'Neil Consultants LLC); Grant Burton (Sydney Trains); Len Niest (Public Transport Victoria); Michael Salvato (NY MTA); William Gleckler (New York City Transit) End 17:30	Development of a Model to Gauge Second-order Effects of Train Component Upgrades William Scott (SMART, University of Wollongong); Vu Lam Cao (SMART INFRASTRUCTURE FACILITY); Ricardo Peculis (University of Wollongong); Peter Campbell (INCOSE) An Investigation of Functionalities of the Future Tool-chain of Aerospace Industry Jinzhi Lu (kth Royal Institute of Technology); Junjie Tang (Beijing Institute of Astronautical System Engineering,); Didem G, Martin Torngren (Department of Machine Design, Mechatronics Unit, KTH-Royal Institute of Technology)			
			Keeping women in systems engineering: gender dynamics in the field Erika Palmer, Benedicte S Wilson (University of Bergen)	A Complete Set of Systems Thinking Skills Ross Arnold (U.S. Army); Jon Wade (Stevens Institute of Technology)	A Case Study of Systems Engineering Implementation in Designing Electronic Blast Systems Aldaine Whyte (University of Pretoria); Louwrence Erasmus (University of Johannesburg)			Integrated Data as the Foundation of Systems Engineering Louis Wheatcraft (Requirements Experts); Michael Ryan (UNSW Canberra); Carl Svensson (Swedish Defense Materiel Administration) Developing A Systems Engineering Capability That Meets the Needs of Your Organization Louis Wheatcraft (Requirements Experts); Carl Svensson (Swedish Defense Materiel Administration); Michael Ryan (UNSW Canberra)			
17:00	18:00		**Working Group Sessions**								
19:30	20:30		**INCOSE Pre-Banquet Reception (Panorama Foyer)**								
20:30	23:00		**INCOSE Banquet (Panorama Ballroom)**								

IS2017 Schedule

Thursday at IS 2017

Start time	End time	Activity	Track 1 (Hall L)	Track 2 (Riverbank 6)	Track 3 (Riverbank 5)	Track 4 (Riverbank 4)	Track 5 (Riverbank 3)	Track 6 (Riverbank 2)
08:00	09:30	Session 10	SE Process	Digitalization	Resilience	Systems Science	System Dynamics	Biomedical & Healthcare
			Jim Armstrong			*James Martin*	*Matthew Hause*	*Nicole Hutchinson*
			NASA's Robotic Mining Competition Provides Undergraduates Full Life Cycle Systems Engineering Experience Jonette Stecklein (NASA)	Panel: Deploying digital technology to legacy environments Peter Campbell (INCOSE); William Palazzi (Palazzirail); Warwick Talbot (Sydney Trains); Bradley Moorhouse (Austrlian Rail Track Corporation); Simon Foster (Office of the National Rail Safety Regulator); Len Neist (Public Transport Victoria)	Panel: Role of Systems Engineers in Engineering Resilience Moderator: Ed Pohl (University of Arkansas) Panelists: Greg Parnell (Department of Industrial Engineering); Stephen Cook (University of South Australia, Adelaide); Tim Ferris (Cranfield University); Simon Georger (Engineer Research and Development Center)	Robotic Satellite Servicing Trade Space Down-Selection Jessica Knizhnik (NASA Goddard Space Flight Center); Mark Austin (University of Maryland); Craig Carignan (NASA Goddard Space Flight Center)	A prototype simulation model for army logistics training Kristy Hudson, Sondoss Elsawah (University of New South Wales Canberra); Michael Ryan (UNSW Canberra)	Trains, Planes and Endoscopes: Using Capability Systems Engineering to reduce hospital-acquired infections Duncan Kemp (Ministry of Defence); Meaghan Oneil (System Design and Strategy)
			VSE 101 - Who, What, When, Where, Why, How Ken Ptack (J&K Consulting)			A Service-based Approach to Force Design, Integration and Analysis Donald Lowe (Defence Science and Technology Group)	Reusable Modules to Support Rapid Model Building: A Case Study of Defence Force Design Joshua Bowers, Sondoss Elsawah, Michael Ryan (University of New South Wales Canberra)	Reverse Engineering Risk: Converging Medical Standards for Improved Systems Engineering Pavel Fomin (INCOSE WMA); William Scheible, Gina Guillaume-Joseph (The MITRE Corporation)
09:30	**10:00**	**Break**	**Break & Key Reserve Paper/Student Posters (Exhibit Hall)**					
10:00	12:10	Session 11	Modeling & Simulation	Government, Defence & Security	Project Planning	Complexity Science	Infrastructure	Healthcare
			Michael Waite	*Subash Kafle*	*Cecilia Haskins*	*Mahmoud Efatmaneshnik*	*Quoc Do*	
			Modeling and Analyzing the Emergency Management Mission as an Executable Model David Flanigan (The Johns Hopkins University Applied Physics Laboratory)	Applying Bayesian Networks to TRL Assessments - Innovation in Systems Engineering Donald York (INCOSE); Marc Austin (Department of Defense); Cheyne Homberger, George Polacek, Virginia Ahalt, Erin Doolittle (US DoD)	Get With The Programme - Achieving Coherence Through Capability Systems Engineering Ian Gibson (Jacobs); Thomas Riley (Thales)	Breaking Out: Systems Engineering To Go Zane Scott (Vitech Corporation)	`Not in My Backyard` is Not Sustainable Ronald Carson (Seattle Pacific University)	Roundtable: Applying SE to Healthcare – Lessons Learned and Challenges on the Horizon Mike Celentano (Roche); Rick Dove (Paradigm Shift International); Meaghan O'Neil (The Math Works); Christophe Waterplas (ResMed Ltd); Edmund Kienast (Australian Digital Health Agency)
			Model-Based Systems Engineering Pathfinder: Informing the Next Steps Karen Weiland (NASA Glenn Research Center); Jon Holladay (NASA Engineering and Safety Center)	Organizational Capabilities in a Government R&D Enterprise Regina Griego, Richard Craft (Sandia National Laboratories)	Fortune Telling, Estimating and Systems Engineering Andy Nolan, Olimpia Vlad (Rolls-Royce plc); Andrew Pickard (Rolls-Royce Corporation); Richard Beasley (Rolls-Royce plc)	Integration and Framing between System Engineering, Enterprise Engineering and Whole of Society Louwrence Erasmus (University of Johannesburg); Braam Greeff (Council for Scientific and Industrial Research)	Availability as a design criterion - Simulation of SKA1_MID Dish Power Infrastructure Steve Dennehy (SKA South Africa); Isabel Meyer (Impact Advantage)	
			Control Theoretic Modeling and Simulation of Supply Chain Management System Obaid Ur Rehman, Michael Ryan (UNSW Canberra)	Tailoring a ConOps for Anonymized Organization Integrated Operations Clark Owens III (NASA)	Enabling Repeatable SE Cost Estimation with COSYSMO and MBSE Barry Papke, Saulius Pavalkis (No Magic); Gan Wang (BAE Systems)	A Graph Theory Approach to Functional Failure Propagation in Early Complex Cyber-Physical Systems (CCPSs) Bryan O'Halloran (Naval Postgraduate School); Nikolaos Papakonstantinou (VTT Technical Research Centre of Finland); Kristin Giammarco (Naval Postgraduate School); Douglas Van Bossuyt (KTM Research)	Systematic Capacity-Based Risk Assessment: Application to Water Service Project in Kassala, Sudan Luna Magpili (Washington State University); Ariel Pinto (ODU); Gnana Bharathy (Office of Environment and Hertitag (NSW)); Mohammed Babiker (Green Wayira)	
12:10	**13:30**	**Lunch**	**Lunch (Exhibit Hall)**					
13:30	15:30	Closing Plenary	**Space Weather: Understanding and Mitigating Impacts on Our Interconnected and Interdependent Critical Infrastructure - Bill Murtagh (National Oceanic and Atmospheric Administration (NOAA))**					
15:30	16:30		**Networking Reception (M Foyer)**					

Saturday at IS 2017

Start time	End time	Duration (min)	Activity	Track 1 Riverbank 5	Track 2 Riverbank 4	Track 3 Riverbank 3	Track 4 Riverbank 2	Track 5 Riverbank 1
08:00	09:30	90	Session A	A.1	A.2	A.3	A.4	A.5
09:30	10:00	30	Break					
10:00	12:00	120	Session B	A.1	A.2	A.3	A.4	A.5
12:00	13:30	90	Lunch Provided					
13:30	15:00	90	Session C	A.1	A.2	A.3	C.4	A.5
15:00	15:30	30	Break					
15:30	17:00	90	Session D	A.1	A.2	A.3	C.4	A.5

Sunday at IS 2017

Start time	End time	Duration (min)	Activity	Track 1 Riverbank 5	Track 2 Riverbank 4	Track 3 Riverbank 3	Track 4 Riverbank 2	Track 5 Riverbank 1
08:00	09:30	90	Session E	E.1	E.2	E.3	E.4	E.5
09:30	10:00	30	Break					
10:00	12:00	120	Session F	F.1	E.2	E.3	E.4	E.5
12:00	13:30	90	Lunch Provided					
13:30	15:00	90	Session G	G.1	E.2	E.3	E.4	G.5
15:00	15:30	30	Break					
15:30	17:00	90	Session H	H.1	E.2	E.3	E.4	G.5

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Monday at IS 2017

Start time	End time	Duration (min)	Activity	Track 1 Hall L	Track 2 Riverbank 6	Track 3 Riverbank 5	Track 4 Riverbank 4	Track 5 Riverbank 3	Track 6 Riverbank 2	Track 7 Sponsors Theather	Track 8 Exhibitors Theater	Track 9 Riverbank 1
08:00	09:30	90	Plenary Session 1	P1								
09:30	10:00	30	Break	Break & Key Reserve Paper/								
10:00	12:10	130	Session 1	MBSE	Systems of Systems	Teaching & Training	Agile SE	TechOps	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
				1.1	1.2.1	1.3.1	1.4.1	1.5.1	1.6.1	1.7.1	1.8.1	1.9
					1.2.2	1.3.2	1.4.2	1.5.2	1.6.2	1.7.2	1.8.2	
					1.2.3	1.3.3	1.4.3	1.5.3	1.6.3	1.7.3	1.8.3	
12:10	13:30	80	Lunch							1.7.4	1.8.4	
13:30	14:55	85	Session 2	MBSE	Systems of Systems	Teaching & Training	Energy	TechOps	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge
				2.1.1	2.2.1	2.3.1	2.4.1	2.5.1	2.6.1	2.7.1	2.8.1	2.9
				2.1.2	2.2.2	2.3.2	2.4.2	2.5.2	2.6.2	2.7.2	2.8.2	
14:55	15:30	35	Break	Break & Key Reserve Paper/						2.7.3	2.8.3	
15:30	16:55	85	Session 3	MBSE	MBCD	Teaching & Training	Energy	Smart Systems	SE Fundamentals	Sponsor Track	Exhibitor Demo Room	
				3.1.1	3.2	3.3.1	3.4.1	3.5.1	3.6.1	3.7.1	3.8.1	
				3.1.2		3.3.2	3.4.2	3.5.2	3.6.2	3.7.2	3.8.2	
										3.7.3	3.8.3	

Thales Learning & Development (10:30-10:50)
Tsinghua University - Optimising tool management
MathWorks (13:30-13:50)
Jama Software (14:00-14:20)
Tom Sawyer Software (16:30-16:50)

Tuesday at IS 2017

Start time	End time	Duration (min)	Activity	Track 1 Hall L	Track 2 Riverbank 6	Track 3 Riverbank 5	Track 4 Riverbank 4	Track 5 Riverbank 3	Track 6 Riverbank 2	Track 7 Sponsors Theather	Track 8 Exhibitors Theater	Track 9 Riverbank 1
08:00	09:30	90	Plenary Session 2	P2								
09:30	10:00	30	Break	Break & Key Reserve Paper/								
10:00	12:10	130	Session 4	MBSE	Requirements	Systems Science	System Safety	Product-line Engineering	Key Reserve Papers: Architecture	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge

				4.1.1 4.1.2 4.1.3	4.2.1 4.2.2 4.2.3	4.3	4.4.1 4.4.2 4.4.3	4.5.1 4.5.2 4.5.3	4.6.1 4.6.3 4.6.5	4.7.1 4.7.2 4.7.3	4.8.1 4.8.2 4.8.3	4.9	4.6.2 4.6.4 4.6.6	4.7.4 4.8.4	Tom Sawyer Software (10:00-10:20) Mentor (11:00-11:20)	Sparx Systems (10:00-10:20) No Magic (10:30-10:50) The REUSE Company
12:10	13:30	80	Lunch							4.7.4	4.8.4					
13:30	14:55	85	Session 5	MBSE	Requirements	Verification & Validation	Acquisition & Supply	Future Mobility	Key Reserve Papers: Systems Thinking	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge				
				5.1.1 5.1.2	5.2.1 5.2.2	5.3.1 5.3.2	5.4.1 5.4.2	5.5	5.6.1 5.6.3	5.7.1 5.7.2	5.8.1 5.8.2	5.9	5.6.2 5.6.4	5.7.3 5.8.3	Defence SA (13:30-13:50) Lockheed Martin - Value Driven Solutions	BigLever Software Project Management Institute
14:55	15:30	35	Break	Break & Key Reserve Paper/						5.7.3	5.8.3					
15:30	16:55	85	Session 6	Invited Panel	Architecture	Verification & Validation	Acquisition & Supply	Future Mobility	Key Reserve Papers: SE management	Sponsor Track	Exhibitor Demo Room					
				6.1	6.2.1 6.2.2	6.3.1 6.3.2	6.4.1 6.4.2	6.5	6.6.1 6.6.3	6.7.1 6.7.2	6.8.1 6.8.2		6.6.2 6.6.4	6.7.3 6.8.3		Intercax (15:30-15:50)
										6.7.3	6.8.3					Vitech (16:30-16:50)

Wednesday at IS 2017

				Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7	Track 8	Track 9				
Start time	End time	Duration (min)	Activity	Hall L	Riverbank 6	Riverbank 5	Riverbank 4	Riverbank 3	Riverbank 2	Sponsors Theather	Exhibitors Theater	**Riverbank 1**				
08:00	09:30	90	Plenary Session 3	P3												
09:30	10:00	30	Break	Break & Key Reserve Paper/ Student Posters												
10:00	12:10	130	Session 7	Process	Architecture	System Integration	Human Factors	Transportation	Key Reserve Papers: Applied Systems Engineering	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge				
				7.1.1 7.1.2 7.1.3	7.2.1 7.2.2 7.2.3	7.3.1 7.3.2 7.3.3	7.4.1 7.4.2 7.4.3	7.5.1 7.5.2 7.5.3	7.6.1 7.6.3 7.6.5	7.7.1 7.7.2 7.7.3	7.8.1 7.8.2 7.8.3	7.9	7.6.2 7.6.4 7.6.6			Method Park (10:00-10:20) ModelFoundry and Object Management Group No Magic (11:00-11:20) Frazer-Nash Consultancy
12:10	13:30	80	Lunch							7.7.4	7.8.4					
13:30	14:55	85	Session 8	Invited Panel	Architecture	Risk & Opportunity Mamgement	Leadership	Transportation	Key Reserve Papers: Methodology	Sponsor Track	Exhibitor Demo Room	Practitioners Challenge				
				8.1	8.2.1 8.2.2	8.3.1 8.3.2	8.4.1 8.4.2	8.5.1 8.5.2	8.6.1 8.6.3	8.7.1 8.7.2	8.8.1 8.8.2	8.9	8.6.2 8.6.4			Capella (13:30-13:50)
14:55	15:30	35	Break	Break & Key Reserve Paper/						8.7.3	8.8.3					
15:30	16:55	85	Session 9	MBSE	Systems Thinking	Resilience	Leadership	Transportation	Key Reserve Papers: MBSE	Sponsor Track	Exhibitor Demo Room					
				9.1.1 9.1.2	9.2.1 9.2.2	9.3.1 9.3.2	9.4	9.5	9.6.1 9.6.3	9.7.1 9.7.2	9.8.1 9.8.2		9.6.2 9.6.4			
										9.7.3	9.8.3					

Thursday at IS 2017

				Track 1	Track 2	Track 3	Track 4	Track 5	Track 6			Track 9				
Start time	End time	Duration (min)	Activity	Hall L	Riverbank 6	Riverbank 5	Riverbank 4	Riverbank 3	Riverbank 2							
08:00	09:30	90	Session 10	SE Process	Digitalization	Resilience	Systems Science	System Dynamics	Biomedical & Healthcare							
				10.1.1 10.1.2	10.2	10.3	10.4.1 10.4.2	10.5.1 10.5.2	10.6.1 10.6.2							
09:30	10:00	30	Break	Break & Key Reserve Paper/												
10:00	12:10	130	Session 11	Modeling & Simulation	Government, Defence & Security	Project Planning	Complexity Science	Infrastructure	Healthcare							
				11.1.1 11.1.2 11.1.3	11.2.1 11.2.2 11.2.3	11.3.1 11.3.2 11.3.3	11.4.1 11.4.2 11.4.3	11.5.1 11.5.2 11.5.3	11.6							
12:10	13:30	80	Lunch													
13:30	14:45	75	Plenary Session 4&5	P4												
				234	198											

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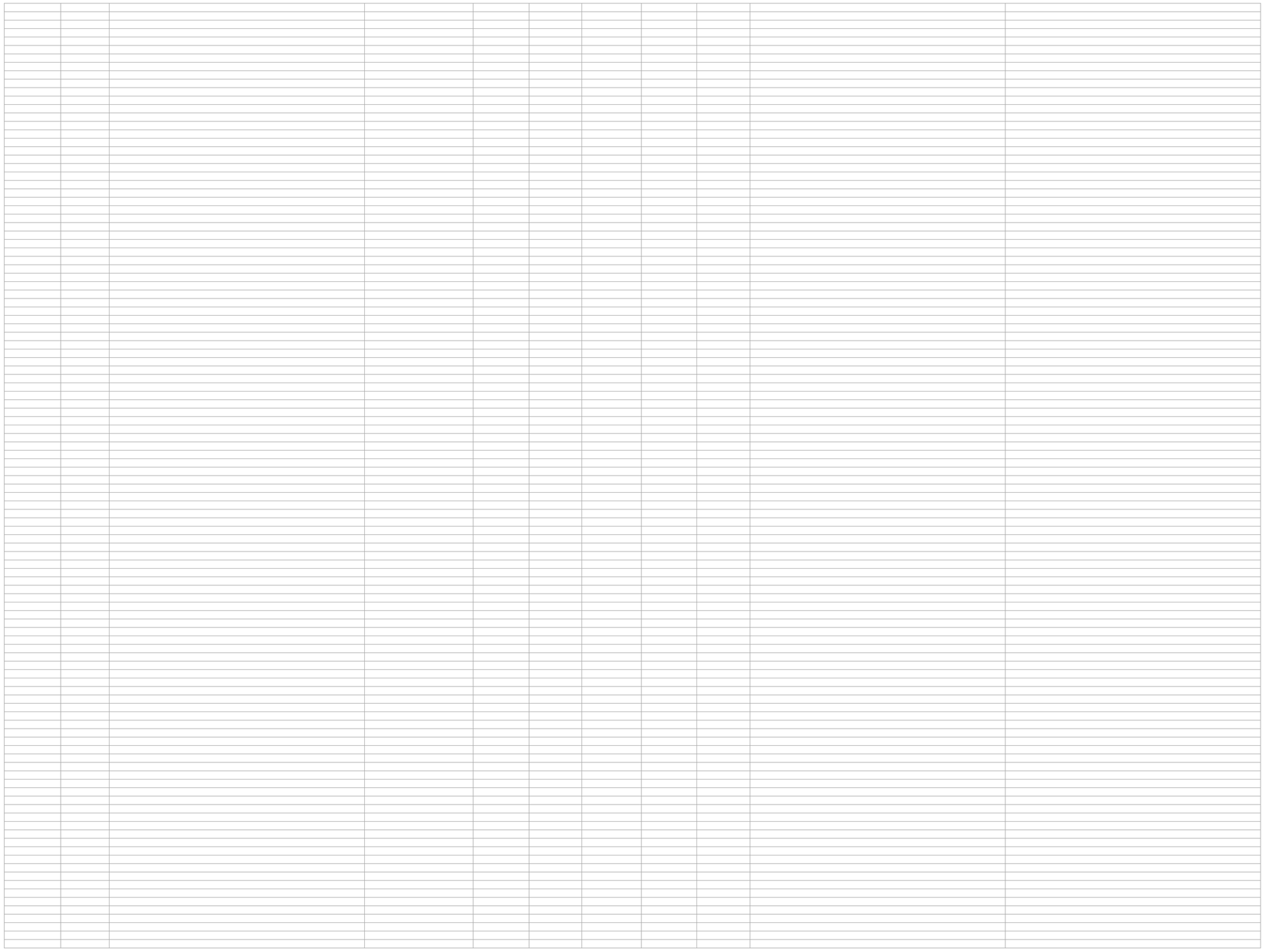
	392861		Strategy Workshop	sessiondetail_392861	coreMeeting	Fri	14	09:00	16:30	
	392862		Strategy Workshop - Break out #2	sessiondetail_392862	coreMeeting	Fri	14	09:30	16:30	
	392891		Break	sessiondetail_392891	break	Fri	14	10:00	10:30	
	392889		Lunch	sessiondetail_392889	break	Fri	14	12:00	13:00	
	392892		Break	sessiondetail_392892	break	Fri	14	15:00	15:30	
	392859		INCOSE Institute for Technical Leadership	sessiondetail_392859	coreMeeting	Fri	14	16:00	17:30	
	393048		NCOSE Institute for Technical Leadership - Dir	sessiondetail_393048	coreMeeting	Fri	14	17:30	20:00	
	392931		Speaker & Session Chair Breakfast	sessiondetail_392931	FB	Sat	15	07:00	07:45	
	392906		Registration	sessiondetail_392906	logistic	Sat	15	07:00	17:00	
	392912		Cyber C@fé	sessiondetail_392912	logistic	Sat	15	07:00	18:00	
	392918		Speaker Ready Room	sessiondetail_392918	logistic	Sat	15	07:45	17:00	
	392854		Corporate Advisory Board Meeting	sessiondetail_392854	coreMeeting	Sat	15	08:00	15:00	
	392860		INCOSE Institute for Technical Leadership	sessiondetail_392860	coreMeeting	Sat	15	08:00	17:00	
A.2	392708	15	Tutorial A.2: An practical introduction to Capa	sessiondetail_392708	tutorial	Sat	15	08:00	17:00	
A.3	392709	33	Tutorial A.3: Best Practice Meets Invisible For	sessiondetail_392709	tutorial	Sat	15	08:00	17:00	
A.4	392710	25	Tutorial A.4: Producing The Big Idea with Almi	sessiondetail_392710	tutorial	Sat	15	08:00	12:00	
	392967		Technical Operations Associate/Assistant Dire	sessiondetail_392967	coreMeeting	Sat	15	09:00	12:00	
	392956		Certification Advisory Group	sessiondetail_392956	coreMeeting	Sat	15	09:00	17:00	
	392843		Break	sessiondetail_392843	break	Sat	15	09:30	10:00	
	392954		Americas Chapters Leaders Meeting	sessiondetail_392954	coreMeeting	Sat	15	10:00	12:00	
	392955		Asia Oceania Chapters Leaders Meeting	sessiondetail_392955	coreMeeting	Sat	15	10:00	12:00	
	392960		EMEA Chapters Leaders Meeting	sessiondetail_392960	coreMeeting	Sat	15	10:00	12:00	
	392693		Lunch	sessiondetail_392693	break	Sat	15	12:00	13:30	
	393044		Technical Operations Working Group Leaders	sessiondetail_393044	coreMeeting	Sat	15	12:00	13:30	
	392953		Academic Council	sessiondetail_392953	coreMeeting	Sat	15	12:30	16:30	Academic
	392964		Industry Outreach Board Meeting	sessiondetail_392964	coreMeeting	Sat	15	13:00	15:00	
	392863		Events Core Planning Committee	sessiondetail_392863	coreMeeting	Sat	15	13:00	16:00	
	393057		Corporate Advisory Board Meeting - Breakout	sessiondetail_393057	coreMeeting	Sat	15	13:30	15:00	
	393058		Corporate Advisory Board Meeting - Breakout	sessiondetail_393058	coreMeeting	Sat	15	13:30	15:00	
	393007		MBSE Patterns Working Group	sessiondetail_393007	WG	Sat	15	13:30	16:30	Patterns
C.4	392711	11	Tutorial C.4: Bridging the Gap between Systen	sessiondetail_392711	tutorial	Sat	15	13:30	17:00	
	392844		Break	sessiondetail_392844	break	Sat	15	15:00	15:30	
	392858		Joint Corporate Advisory Board / Tech Ops / IS	sessiondetail_392858	coreMeeting	Sat	15	15:00	17:00	
	392837		Corporate Advisory Board Dinner (By invitatio	sessiondetail_392837	socialEvents	Sat	15	19:00	22:00	
	392932		Speaker & Session Chair Breakfast	sessiondetail_392932	FB	Sun	16	07:00	07:45	
	392907		Registration	sessiondetail_392907	logistic	Sun	16	07:00	17:00	
	392913		Cyber C@fé	sessiondetail_392913	logistic	Sun	16	07:00	18:00	
	392919		Speaker Ready Room	sessiondetail_392919	logistic	Sun	16	07:45	17:00	
	393028		INCOSE Knowledge Exam	sessiondetail_393028	coreMeeting	Sun	16	08:00	11:00	
E.2	392941		IS17 Systems Summit on Critical-Problem Defi	sessiondetail_392941	invited	Sun	16	08:00	17:00	
E.3	392712	14	Tutorial E.3: ISO 42020 - Architecture Process	sessiondetail_392712	tutorial	Sun	16	08:00	17:00	
E.4	392713	8	Tutorial E.4: Best Practices of Systems of Syste	sessiondetail_392713	tutorial	Sun	16	08:00	17:00	
E.5	392714	19	Tutorial E.5: What Forest? All I See are these	sessiondetail_392714	tutorial	Sun	16	08:00	12:00	
	392857		Joint Leadership Meeting	sessiondetail_392857	coreMeeting	Sun	16	09:00	10:30	
	392845		Break	sessiondetail_392845	break	Sun	16	09:30	10:00	
	392961		INCOSE Fellows	sessiondetail_392961	coreMeeting	Sun	16	10:00	12:00	
	392957		Certification Advisory Group	sessiondetail_392957	coreMeeting	Sun	16	10:30	17:00	
	392855		Board of Directors Meeting	sessiondetail_392855	coreMeeting	Sun	16	11:00	18:00	
	392694		Lunch	sessiondetail_392694	break	Sun	16	12:00	13:30	
	392864		INCOSE Events - IS2017 ESPT Meeting	sessiondetail_392864	coreMeeting	Sun	16	13:00	16:00	
	393006		MBSE Patterns Working Group	sessiondetail_393006	WG	Sun	16	13:30	16:30	Patterns
	393041		SoS Working Group Meeting	sessiondetail_393041	WG	Sun	16	13:30	17:00	System of Systems
G.1	392868	16	Panel: Perspectives on ABET Accreditation of '	sessiondetail_392868	panel	Sun	16	13:30	15:00	
G.5	392715	17	Tutorial G.5: Systems Security Engineering: Cc	sessiondetail_392715	tutorial	Sun	16	13:30	17:00	
	393059		INCOSE Professional Training Initiative (PTI)	sessiondetail_393059	WG	Sun	16	14:00	15:30	training
	392846		Break	sessiondetail_392846	break	Sun	16	15:00	15:30	
H.1	392869	20	Panel: Building a Pathway to Systems Educati	sessiondetail_392869	panel	Sun	16	15:30	17:00	
	393035		EWLSE Informal Gathering and Networking	sessiondetail_393035	WG	Sun	16	17:15	18:15	
	392933		Speaker & Session Chair Breakfast	sessiondetail_392933	FB	Mon	17	07:00	07:45	
	393036	STR	Systems Thinking Roundtable	sessiondetail_393036	WG	Mon	17	07:00	08:00	Systems Science
	392908		Registration	sessiondetail_392908	logistic	Mon	17	07:00	17:00	
	392914		Cyber C@fé	sessiondetail_392914	logistic	Mon	17	07:00	18:00	
	392920		Speaker Ready Room	sessiondetail_392920	logistic	Mon	17	07:45	17:00	
P1	392937		Force Design: Evolution not revolution	sessiondetail_392937	keynote	Mon	17	08:00	09:25	
	392847		Break	sessiondetail_392847	break	Mon	17	09:30	10:00	
	392924		Exhibit Hall	sessiondetail_392924	logistic	Mon	17	09:30	19:30	
	393034		VSE Working Group	sessiondetail_393034	WG	Mon	17	10:00	12:00	SE in VSE
	393045		Software Systems Interface WG (Emerging)	sessiondetail_393045	WG	Mon	17	10:00	12:00	MBSE Initiative;Resilient Systems
	393055		Lean Systems Engineering	sessiondetail_393055	WG	Mon	17	10:00	12:00	Lean Systems Engineering
1.1	392716	1	Panel: Be It Resolved: You are Wasting Time. '	sessiondetail_392716	panel	Mon	17	10:00	12:10	
1.2.1	392699	173	Using the SoSE Principles Framework	sessiondetail_392699	paper	Mon	17	10:00	10:40	
1.3.1	392702	119	Version 0.75 of the Proposed INCOSE Compet	sessiondetail_392702	paper	Mon	17	10:00	10:40	Academic
1.4.1	392705	135	Defence requires Enterprise-Level Innovation	sessiondetail_392705	paper	Mon	17	10:00	10:40	
1.5.1	392943	1	PM-SE Integration Working Group	sessiondetail_392943	invited	Mon	17	10:00	10:40	TechOps
1.6.1	393027	IC13	SE Fundamentals on Systemic Design Enginee	sessiondetail_393027	invited	Mon	17	10:00	10:40	SE101
1.9	392835		Practitioners Challenge	sessiondetail_392835	invited	Mon	17	10:00	12:10	
1.8.2	393033		Thales Learning & Development	sessiondetail_393033	exhibition	Mon	17	10:30	10:50	
1.2.2	392700	58	A SoS Approach for Engineering Capability Pro	sessiondetail_392700	paper	Mon	17	10:45	11:25	
1.3.2	392703	105	Framework for Problem Definition - A Joint M	sessiondetail_392703	paper	Mon	17	10:45	11:25	Academic
1.4.2	392706	5	Viable Systems Analysis of the Wardley IT Evo	sessiondetail_392706	paper	Mon	17	10:45	11:25	
1.5.2	392944	2	Complexity Working Group	sessiondetail_392944	invited	Mon	17	10:45	11:25	TechOps
1.6.2	393026	IC8	Essentials of Architecting: Setting the Big Pict	sessiondetail_393026	invited	Mon	17	10:45	11:25	SE101
1.8.3	393065		Tsinghua University - Optimising tool manage	sessiondetail_393065	exhibition	Mon	17	11:00	11:20	
1.2.3	392978	98	Knowledge Based Decision Model for Architec	sessiondetail_392978	paper	Mon	17	11:30	12:10	
1.3.3	392704	67	Challenging Architects in Education: the Smar	sessiondetail_392704	paper	Mon	17	11:30	12:10	Academic
1.4.3	392707	73	Case Study: Agile SE Process for Centralized S	sessiondetail_392707	paper	Mon	17	11:30	12:10	
1.5.3	392945	4	Standards Initiative	sessiondetail_392945	invited	Mon	17	11:30	12:10	TechOps
1.6.3	393025	IC9	SE Fundamentals on Requirements: "I want a	sessiondetail_393025	invited	Mon	17	11:30	12:10	
	392695		Lunch	sessiondetail_392695	break	Mon	17	12:00	13:30	
	392890		Welcome Lunch for New Members and First-T	sessiondetail_392890	socialEvents	Mon	17	12:00	13:30	
	393011		Competency WG	sessiondetail_393011	WG	Mon	17	13:30	15:00	Competency
	393040		Critical Infrastructure Protection and Recover	sessiondetail_393040	WG	Mon	17	13:30	15:00	Critical Infrastructure
	393054		PLE WG Presentation and Working Session	sessiondetail_393054	WG	Mon	17	13:30	15:00	Product Lines
2.1.1	392717	46	MBSE Grid: A Simplified SysML-Based Approa	sessiondetail_392717	paper	Mon	17	13:30	14:10	
2.2.1	392721	134	Defining `System`: a Comprehensive Approac	sessiondetail_392721	paper	Mon	17	13:30	14:10	
2.3.1	392723	176	The Roles of Systems Engineers Revisited	sessiondetail_392723	paper	Mon	17	13:30	14:10	PowerEnergy; Academic
2.4.1	392727	117	A Context-Enabled Systems Development Me	sessiondetail_392727	paper	Mon	17	13:30	14:10	PowerEnergy
2.5.1	392946	3	Decision Analysis Working Group	sessiondetail_392946	invited	Mon	17	13:30	14:10	TechOps
2.6.1	393023	IC14	SE Fundamental on Integration, Verification &	sessiondetail_393023	invited	Mon	17	13:30	14:10	SE101
2.8.1	392682		MathWorks	sessiondetail_392682	exhibition	Mon	17	13:30	13:50	
2.9	392828		Practitioners Challenge	sessiondetail_392828	invited	Mon	17	13:30	14:55	
	392966		Planning and Budget Meeting	sessiondetail_392966	coreMeeting	Mon	17	14:00	15:00	
2.8.2	393013		Jama Software	sessiondetail_393013	exhibition	Mon	17	14:00	14:20	
2.1.2	392718	161	Graph-Based Digital Blueprint for Model Base	sessiondetail_392718	paper	Mon	17	14:15	14:55	
2.2.2	392722	42	Evaluating Australia's most complex system-o	sessiondetail_392722	paper	Mon	17	14:15	14:55	
2.3.2	392724	154	The U.S. Department of Defense Systems Engi	sessiondetail_392724	paper	Mon	17	14:15	14:55	Academic
2.4.2	392730	82	Evolving tolerance management for increased	sessiondetail_392730	paper	Mon	17	14:15	14:55	PowerEnergy
2.5.2	392947	7	Oil & Gas Working Group	sessiondetail_392947	invited	Mon	17	14:15	14:55	PowerEnergy; TechOps
2.6.2	393024	IC10	SE Fundamentals on System of Systems	sessiondetail_393024	invited	Mon	17	14:15	14:55	SE101

	392848		Break	sessiondetail_392848	break	Mon	17	15:00	15:30	
	393005		MBSE Patterns Working Group	sessiondetail_393005	WG	Mon	17	15:30	17:00	Patterns
	393008		Quality Management (SE-QM) Working Group	sessiondetail_393008	WG	Mon	17	15:30	17:00	
	393009		Agile Systems & Systems Engineering Worksh	sessiondetail_393009	WG	Mon	17	15:30	17:00	Agile Systems and Systems Engineering
3.1.1	392719	111	An Exploration of MBSE Through the Modelli	sessiondetail_392719	paper	Mon	17	15:30	16:10	
3.2	392735	11	Panel: Implementing Model-Based Conceptua	sessiondetail_392735	panel	Mon	17	15:30	17:30	Transportation
3.3.1	392725	96	Alternate Reality Games in the Systems Engin	sessiondetail_392725	paper	Mon	17	15:30	16:10	Academic
3.4.1	392731	49	Cause and Impact Analysis of Cost and Sched	sessiondetail_392731	paper	Mon	17	15:30	16:10	PowerEnergy
3.5.1	392733	172	Using an Agent-Based Simulation to Evaluate	sessiondetail_392733	paper	Mon	17	15:30	16:10	Automotive; Transportation
3.6.1	393021	IC11	SE Fundamentals on Systems Thinking: Systen	sessiondetail_393021	invited	Mon	17	15:30	16:10	SE101
3.1.2	392720	6	Toward Systems Engineering Modeling Stand	sessiondetail_392720	paper	Mon	17	16:15	16:55	
3.3.2	392726	177	SE Simulation Experience Design: A Case Stud	sessiondetail_392726	paper	Mon	17	16:15	16:55	Academic
3.4.2	392732	10	Applying A3 reports for early validation and o	sessiondetail_392732	paper	Mon	17	16:15	16:55	PowerEnergy
3.5.2	392734	78	Developing an Operational Concept Framewo	sessiondetail_392734	paper	Mon	17	16:15	16:55	Automotive; Transportation
3.6.2	393022	IC12	SE Fundamentals on Portfolio, Program, and F	sessiondetail_393022	invited	Mon	17	16:15	16:55	SE101
3.8.3	392684		Tom Sawyer Software	sessiondetail_392684	exhibition	Mon	17	16:30	16:50	
	392838		Ice Breaker Reception	sessiondetail_392838	socialEvents	Mon	17	18:00	19:30	
	392934		Speaker & Session Chair Breakfast	sessiondetail_392934	FB	Tue	18	07:00	07:45	
	393037	STR	Systems Thinking Roundtable	sessiondetail_393037	WG	Tue	18	07:00	08:00	Systems Science
	392909		Registration	sessiondetail_392909	logistic	Tue	18	07:00	17:00	
	392915		Cyber C@fé	sessiondetail_392915	logistic	Tue	18	07:00	17:00	
	392921		Speaker Ready Room	sessiondetail_392921	logistic	Tue	18	07:45	17:00	
P2	392938		The Japanese Bullet Train 'Shinkansen' Systen	sessiondetail_392938	keynote	Tue	18	08:00	09:25	Automotive; Transportation
	392849		Break	sessiondetail_392849	break	Tue	18	09:30	10:00	
	392925		Exhibit Hall	sessiondetail_392925	logistic	Tue	18	09:30	18:00	
	392958		Certification Meeting	sessiondetail_392958	coreMeeting	Tue	18	10:00	12:00	
	392965		Nominations and Elections	sessiondetail_392965	coreMeeting	Tue	18	10:00	12:00	
	393049		Resilience Working Group IS Tag-up	sessiondetail_393049	WG	Tue	18	10:00	12:00	Resilient Systems
4.1.1	392744	152	Exploring the Cyber-Physical Design Space	sessiondetail_392744	paper	Tue	18	10:00	10:40	
4.2.1	392749	47	Modeling Legal Requirements	sessiondetail_392749	paper	Tue	18	10:00	10:40	Automotive; PowerEnergy
4.3	392736	3	Panel: Exploring the Frontiers of Systems Scie	sessiondetail_392736	panel	Tue	18	10:00	12:10	academic
4.4.1	392760	52	System Theoretic Safety Analysis of the Sewe	sessiondetail_392760	paper	Tue	18	10:00	10:40	
4.5.1	392769	77	Where the big bucks (will) come from - Imple	sessiondetail_392769	paper	Tue	18	10:00	10:40	Automotive
4.6.1	392975	65	Modeling system modes, states, configuratior	sessiondetail_392975	poster	Tue	18	10:00	10:20	
4.7.1	392685		Tom Sawyer Software	sessiondetail_392685	sponsor	Tue	18	10:00	10:20	
4.8.1	392675		Sparx Systems	sessiondetail_392675	exhibition	Tue	18	10:00	10:20	
4.9	392829		Practitioners Challenge	sessiondetail_392829	invited	Tue	18	10:00	12:10	
4.6.2	392976	11	Crafting a Collaboration Space for the Concep	sessiondetail_392976	poster	Tue	18	10:20	10:40	
4.8.2	392683		No Magic	sessiondetail_392683	exhibition	Tue	18	10:30	10:50	
4.1.2	392745	125	The Application of MBSE to Inform Workforce	sessiondetail_392745	paper	Tue	18	10:45	11:25	
4.2.2	392977	148	Systems Security Engineering: What Every Sys	sessiondetail_392977	paper	Tue	18	10:45	11:25	
4.4.2	392761	60	A Complexity Measure for System Safety Assu	sessiondetail_392761	paper	Tue	18	10:45	11:25	
4.5.2	392770	41	Model Based Engineering and Product Line E	sessiondetail_392770	paper	Tue	18	10:45	11:25	Automotive
4.7.3	393016		Mentor	sessiondetail_393016	sponsor	Tue	18	11:00	11:20	
4.8.3	392670		The REUSE Company	sessiondetail_392670	exhibition	Tue	18	11:00	11:20	
4.1.3	392746	129	An industrial example of using Enterprise Arcl	sessiondetail_392746	paper	Tue	18	11:30	12:10	Automotive
4.2.3	392751	80	Requirements engineering for radical innovat	sessiondetail_392751	paper	Tue	18	11:30	12:10	
4.4.3	392762	74	Semantically-enabled Model-based Systems E	sessiondetail_392762	paper	Tue	18	11:30	12:10	
4.5.3	392771	131	A Feature Ontology to Support Feature-Base	sessiondetail_392771	paper	Tue	18	11:30	12:10	Automotive
4.6.5	392979	55	Model-based design of an autonomous functi	sessiondetail_392979	poster	Tue	18	11:30	11:50	
	392696		Lunch	sessiondetail_392696	break	Tue	18	12:00	13:30	
	392968		Ways and Means	sessiondetail_392968	coreMeeting	Tue	18	13:00	15:00	
	393056		Directions of Future Systems Engineering Re	sessiondetail_393056	WG	Tue	18	13:00	15:00	
	393010		Systems Security Engineering Workshop	sessiondetail_393010	WG	Tue	18	13:30	15:00	Systems Security Engineering
5.1.1	392747	167	Using MBSE to Evaluate and Protect the Electi	sessiondetail_392747	paper	Tue	18	13:30	14:10	
5.2.1	392752	70	A Requirements' Eye View of Product Develo	sessiondetail_392752	paper	Tue	18	13:30	14:10	
5.3.1	392756	155	Warranting System Validity Through a Holistic	sessiondetail_392756	paper	Tue	18	13:30	14:10	
5.4.1	392763	89	A Model-Based Method for Design Option Ev	sessiondetail_392763	paper	Tue	18	13:30	14:10	PowerEnergy
5.5	392737	19	Joint Automotive & Transportation Industry R	sessiondetail_392737	roundtable	Tue	18	13:30	14:55	Automotive; Transportation
5.6.1	392981	174	Systemic Design Engineering	sessiondetail_392981	poster	Tue	18	13:30	13:50	
5.7.1	393032		Defence SA	sessiondetail_393032	sponsor	Tue	18	13:30	13:50	
5.9	392830		Practitioners Challenge	sessiondetail_392830	invited	Tue	18	13:30	14:55	
5.6.2	392982	137	Aditi: A Systems view of Knowledge Processes	sessiondetail_392982	poster	Tue	18	13:50	14:10	
5.8.2	392634		BigLever Software	sessiondetail_392634	exhibition	Tue	18	14:00	14:20	
5.1.2	392748	156	An MBSE Methodology for Capability Systems	sessiondetail_392748	paper	Tue	18	14:15	14:55	
5.2.2	392753	130	System Scenario Selection Method for Faster	sessiondetail_392753	paper	Tue	18	14:15	14:55	
5.3.2	392757	147	V&V - All the Way Through	sessiondetail_392757	paper	Tue	18	14:15	14:55	PowerEnergy
5.4.2	392766	102	Towards a modular System Dynamics approac	sessiondetail_392766	paper	Tue	18	14:15	14:55	
5.7.3	393063		Lockheed Martin - Value Driven Solutions	sessiondetail_393063	sponsor	Tue	18	14:30	14:50	
5.8.3	392948		Project Management Institute	sessiondetail_392948	exhibition	Tue	18	14:30	14:50	
	392850		Break	sessiondetail_392850	break	Tue	18	15:00	15:30	
	392865		INCOSE Events - IS2018 ESPT Meeting	sessiondetail_392865	coreMeeting	Tue	18	15:00	17:00	
	392962		INCOSE Fellows	sessiondetail_392962	coreMeeting	Tue	18	15:00	17:00	
6.1	392772	6	The role of Design in Systems Engineering - Sy	sessiondetail_392772	invited	Tue	18	15:30	16:55	
6.2.1	392754	100	A hybrid approach for supply chain analysis: A	sessiondetail_392754	paper	Tue	18	15:30	16:10	
6.3.1	392758	24	Verification of Requirements: System of Syste	sessiondetail_392758	paper	Tue	18	15:30	16:10	
6.4.1	392767	142	Acquisition System Development: A Complex	sessiondetail_392767	paper	Tue	18	15:30	16:10	
6.5	392738	19	Joint Automotive & Transportation Industry R	sessiondetail_392738	roundtable	Tue	18	15:30	17:30	Automotive; Transportation
6.6.1	392985	31	Improving Joint Force Integration by Design ir	sessiondetail_392985	poster	Tue	18	15:30	15:50	
6.8.1	392640		Intercax	sessiondetail_392640	exhibition	Tue	18	15:30	15:50	
6.6.2	392986	104	Applying Design Thinking in Systems Engineer	sessiondetail_392986	poster	Tue	18	15:50	16:10	
6.2.2	392755	13	A Combinatorial Approach to Tradespace Expl	sessiondetail_392755	paper	Tue	18	16:15	16:55	
6.3.2	392759	95	Test Strategy to detect Industrial Control Syst	sessiondetail_392759	paper	Tue	18	16:15	16:55	PowerEnergy
6.4.2	392768	181	Use of the Goal Structuring Notation to Argue	sessiondetail_392768	paper	Tue	18	16:15	16:55	
6.6.3	392988	81	Multicast Routing Protocol for Energy Efficien	sessiondetail_392988	poster	Tue	18	16:15	16:35	
6.8.3	393014		Vitech	sessiondetail_393014	exhibition	Tue	18	16:30	16:50	
6.6.4	392989	88	The role of Command-and-control manageme	sessiondetail_392989	poster	Tue	18	16:35	16:55	
	392839		The Exhibitors' Reception	sessiondetail_392839	socialEvents	Tue	18	17:00	18:00	
	392840		Certification Reception (ASEP, CSEP, ESEP only	sessiondetail_392840	socialEvents	Tue	18	18:00	19:00	
	392935		Speaker & Session Chair Breakfast	sessiondetail_392935	FB	Wed	19	07:00	07:45	
	393038	STR	Systems Thinking Roundtable	sessiondetail_393038	WG	Wed	19	07:00	08:00	Systems Science
	392910		Registration	sessiondetail_392910	logistic	Wed	19	07:00	17:00	
	392916		Cyber C@fé	sessiondetail_392916	logistic	Wed	19	07:00	17:00	
	392922		Speaker Ready Room	sessiondetail_392922	logistic	Wed	19	07:45	17:00	
P3	392939		Systems Engineering and Autonomy: Opportu	sessiondetail_392939	keynote	Wed	19	08:00	09:25	Automotive; Transportation
	392851		Break	sessiondetail_392851	break	Wed	19	09:30	10:00	
	392926		Exhibit Hall	sessiondetail_392926	logistic	Wed	19	09:30	17:00	
	392959		Certification Meeting	sessiondetail_392959	coreMeeting	Wed	19	10:00	12:00	
7.1.1	392775	75	Storytelling as a Key Enabler for Systems Engi	sessiondetail_392775	paper	Wed	19	10:00	10:40	
7.2.1	392778	34	Conceptual Data Modeling for the Functional	sessiondetail_392778	paper	Wed	19	10:00	10:40	
7.3.1	392781	93	Improving Integration: Thinking Beyond the P	sessiondetail_392781	paper	Wed	19	10:00	10:40	Transportation
7.4.1	392784	112	I Don't Need Requirements - I Know What I'm	sessiondetail_392784	paper	Wed	19	10:00	10:40	
7.5.1	392788	140	Your Wish, My Command - Speeding up Proje	sessiondetail_392788	paper	Wed	19	10:00	10:40	Transportation
7.8.1	392681		Method Park	sessiondetail_392681	exhibition	Wed	19	10:00	10:20	
7.9	392831		Practitioners Challenge	sessiondetail_392831	invited	Wed	19	10:00	12:10	
7.6.2	392992	28	The myths and the reality of problem-solving	sessiondetail_392992	poster	Wed	19	10:20	10:40	
7.8.2	393015		ModelFoundry and Object Management Grou	sessiondetail_393015	exhibition	Wed	19	10:30	10:50	
7.1.2	392776	87	Systems Engineering Very Small Entity Use Ca	sessiondetail_392776	paper	Wed	19	10:45	11:25	
7.2.2	392779	136	Value based Architecture of Digital Product Se	sessiondetail_392779	paper	Wed	19	10:45	11:25	
7.3.2	392782	90	Architecture-Based SCMILE Service Framewor	sessiondetail_392782	paper	Wed	19	10:45	11:25	
7.4.2	392786	133	Integrating the end user perspective in techni	sessiondetail_392786	paper	Wed	19	10:45	11:25	

7.5.2	392984	3	Conducting a Model Based Systems Engineeri	sessiondetail_392984	paper	Wed	19	10:45	11:25	
7.8.3	393042		No Magic	sessiondetail_393042	exhibition	Wed	19	11:00	11:20	
7.1.3	392777	85	Future Proofing Process	sessiondetail_392777	paper	Wed	19	11:30	12:10	
7.2.3	392780	141	The Impact of Lean on the mining industry: a	sessiondetail_392780	paper	Wed	19	11:30	12:10	
7.3.3	392783	108	Foundations for improved integration - Using	sessiondetail_392783	paper	Wed	19	11:30	12:10	Transportation
7.4.3	392787	169	Integrated Human Factors Views in the Unifie	sessiondetail_392787	paper	Wed	19	11:30	12:10	
7.5.3	392790	16	Realizing the Value of Systems Engineering	sessiondetail_392790	paper	Wed	19	11:30	12:10	Automotive; Transportation
7.6.5	392995	126	Designing inter-factory architecture for highe	sessiondetail_392995	poster	Wed	19	11:30	11:50	
7.8.4	393046		Frazer-Nash Consultancy	sessiondetail_393046	exhibition	Wed	19	11:30	11:50	
	392697		Lunch	sessiondetail_392697	break	Wed	19	12:00	13:30	
8.1	392773	5	Systems Engineering and Asset Management	sessiondetail_392773	invited	Wed	19	13:30	14:55	Transportation
8.2.1	392791	51	Overview of an Emerging Standard on Archite	sessiondetail_392791	paper	Wed	19	13:30	14:10	
8.3.1	392996	72	Innovation, Risk, Agility, and Learning, Viewe	sessiondetail_392996	paper	Wed	19	13:30	14:10	
8.4.1	392795	121	Challenges and Opportunities for the New Ge	sessiondetail_392795	paper	Wed	19	13:30	14:10	PowerEnergy; academic
8.5.1	392797	84	The Transport for NSW Transport Network Ar	sessiondetail_392797	paper	Wed	19	13:30	14:10	Transportation
8.6.1	392997	165	A Systematic Approach to Influencing System	sessiondetail_392997	poster	Wed	19	13:30	13:50	
8.8.1	392974		Capella	sessiondetail_392974	exhibition	Wed	19	13:30	13:50	
8.9	392832		Practitioners Challenge	sessiondetail_392832	invited	Wed	19	13:30	14:55	
8.6.2	392998	32	On the Use of the Terms Verification and Valid	sessiondetail_392998	poster	Wed	19	13:50	14:10	Automotive
8.2.2	392792	145	The ValXplore method: exploring desirability,	sessiondetail_392792	paper	Wed	19	14:15	14:55	
8.3.2	392794	7	Environmental Asset Management: Risk Mana	sessiondetail_392794	paper	Wed	19	14:15	14:55	
8.4.2	392796	94	An Innovative Program to Further the Careers	sessiondetail_392796	paper	Wed	19	14:15	14:55	PowerEnergy; academic
8.5.2	392798	151	System Engineering Analysis of Construction E	sessiondetail_392798	paper	Wed	19	14:15	14:55	Automotive; Transportation
8.6.3	392999	56	A Proposal for Standardized Use of the Term '	sessiondetail_392999	poster	Wed	19	14:15	14:35	
8.8.3	393047		PTC	sessiondetail_393047	exhibition	Wed	19	14:30	14:50	
8.6.4	393000	123	Security Level Identification and Secure Softw	sessiondetail_393000	poster	Wed	19	14:35	14:55	
	392852		Break	sessiondetail_392852	break	Wed	19	15:00	15:30	
	392866		INCOSE Events - IS2019 ESPT Meeting	sessiondetail_392866	coreMeeting	Wed	19	15:00	17:00	
	392963		INCOSE Foundation Meeting	sessiondetail_392963	coreMeeting	Wed	19	15:00	17:00	
	393060		INCOSE IT Progress, Actions and AD roles	sessiondetail_393060	WG	Wed	19	15:30	17:00	
9.1.1	392799	128	Who's Line is it Anyway? Using MBSE in the M	sessiondetail_392799	paper	Wed	19	15:30	16:10	
9.2.1	392802	170	Improving the Systems Thinking Skills of the S	sessiondetail_392802	paper	Wed	19	15:30	16:10	
9.3.1	392804	120	Engineered Resilient Systems with Value Focu	sessiondetail_392804	paper	Wed	19	15:30	16:10	
9.4	392740	13	Panel: Systems Engineering Leadership: Navig	sessiondetail_392740	panel	Wed	19	15:30	16:55	academic
9.5	392739	21	Transportation Industry Roundtable: Deployin	sessiondetail_392739	roundtable	Wed	19	15:30	17:30	Automotive; Transportation
9.6.1	393001	79	Development of a Model to Gauge Second-or	sessiondetail_393001	poster	Wed	19	15:30	15:50	
9.6.2	393002	110	An Investigation of Functionalities of the Futu	sessiondetail_393002	poster	Wed	19	15:50	16:10	
9.1.2	392983	17	Keeping women in systems engineering: gend	sessiondetail_392983	paper	Wed	19	16:15	16:55	
9.2.2	392803	23	A Complete Set of Systems Thinking Skills	sessiondetail_392803	paper	Wed	19	16:15	16:55	
9.3.2	392994	114	A Case Study of Systems Engineering Implem	sessiondetail_392994	paper	Wed	19	16:15	16:55	
9.6.3	393003	20	Integrated Data as the Foundation of Systems	sessiondetail_393003	poster	Wed	19	16:15	16:35	
9.6.4	393004	21	Developing A Systems Engineering Capability	sessiondetail_393004	poster	Wed	19	16:35	16:55	
	392841		INCOSE Banquet (Ticket required)	sessiondetail_392841	socialEvents	Wed	19	19:30	23:00	
	392936		Speaker & Session Chair Breakfast	sessiondetail_392936	FB	Thu	20	07:00	07:45	
	393039	STR	Systems Thinking Roundtable	sessiondetail_393039	WG	Thu	20	07:00	08:00	Systems Science
	392911		Registration	sessiondetail_392911	logistic	Thu	20	07:00	17:00	
	392917		Cyber C@fé	sessiondetail_392917	logistic	Thu	20	07:00	18:00	
	392923		Speaker Ready Room	sessiondetail_392923	logistic	Thu	20	07:45	17:00	
	393043		Certification Application Reviewer (CAR) Train	sessiondetail_393043	WG	Thu	20	08:00	12:00	Training
10.1.1	392991	124	NASA's Robotic Mining Competition Provides	sessiondetail_392991	paper	Thu	20	08:00	08:40	
10.2	392743	6	Panel: Deploying digital technology to legacy	sessiondetail_392743	panel	Thu	20	08:00	09:25	Transportation; PowerEnergy; academic
10.3	392741	12	Panel: Role of Systems Engineers in Engineeri	sessiondetail_392741	panel	Thu	20	08:00	09:25	Transportation
10.4.1	392822	106	Robotic Satellite Servicing Trade Space Down	sessiondetail_392822	paper	Thu	20	08:00	08:40	
10.5.1	392824	27	A prototype simulation model for army logisti	sessiondetail_392824	paper	Thu	20	08:00	08:40	
10.6.1	392826	107	Trains, Planes and Endoscopes: Using Capabili	sessiondetail_392826	paper	Thu	20	08:00	08:40	
10.1.2	392993	150	VSE 101 - Who, What, When, Where, Why, Ho	sessiondetail_392993	paper	Thu	20	08:45	09:25	
10.4.2	392823	122	A Service-based Approach to Force Design, In	sessiondetail_392823	paper	Thu	20	08:45	09:25	
10.5.2	392825	26	Reusable Modules to Support Rapid Model Ba	sessiondetail_392825	paper	Thu	20	08:45	09:25	
10.6.2	392827	83	Reverse Engineering Risk: Converging Medica	sessiondetail_392827	paper	Thu	20	08:45	09:25	
	392853		Break	sessiondetail_392853	break	Thu	20	09:30	10:00	
	392927		Exhibit Hall	sessiondetail_392927	logistic	Thu	20	09:30	13:30	
	393018		Architecture Working Group Plenary Meeting	sessiondetail_393018	WG	Thu	20	10:00	12:00	Architecture
11.1.1	392807	12	Modeling and Analyzing the Emergency Mana	sessiondetail_392807	paper	Thu	20	10:00	10:40	
11.2.1	392810	8	Applying Bayesian Networks to TRL Assessme	sessiondetail_392810	paper	Thu	20	10:00	10:40	
11.3.1	392815	86	Get With The Programme - Achieving Coheren	sessiondetail_392815	paper	Thu	20	10:00	10:40	
11.4.1	392817	171	Breaking Out: Systems Engineering To Go	sessiondetail_392817	paper	Thu	20	10:00	10:40	
11.5.1	392819	36	'Not in My Backyard' is Not Sustainable	sessiondetail_392819	paper	Thu	20	10:00	10:40	
11.6	392742	9	Roundtable: Applying SE to Healthcare – Less	sessiondetail_392742	roundtable	Thu	20	10:00	12:10	
11.1.2	392808	22	Model-Based Systems Engineering Pathfinder	sessiondetail_392808	paper	Thu	20	10:45	11:25	
11.2.2	392811	153	Organizational Capabilities in a Government R	sessiondetail_392811	paper	Thu	20	10:45	11:25	
11.3.2	392814	68	Fortune Telling, Estimating and Systems Engin	sessiondetail_392814	paper	Thu	20	10:45	11:25	
11.4.2	392816	115	Integration and Framing between System Eng	sessiondetail_392816	paper	Thu	20	10:45	11:25	
11.5.2	392820	2	Availability as a design criterion - Simulation c	sessiondetail_392820	paper	Thu	20	10:45	11:25	
	392856		Board of Directors Meeting	sessiondetail_392856	coreMeeting	Thu	20	11:30	13:30	
11.1.3	392809	97	Control Theoretic Modeling and Simulation of	sessiondetail_392809	paper	Thu	20	11:30	12:10	
11.2.3	392812	69	Tailoring a ConOps for Anonymized Organizati	sessiondetail_392812	paper	Thu	20	11:30	12:10	
11.3.3	392813	99	Enabling Repeatable SE Cost Estimation with t	sessiondetail_392813	paper	Thu	20	11:30	12:10	
11.4.3	392818	92	A Graph Theory Approach to Functional Failur	sessiondetail_392818	paper	Thu	20	11:30	12:10	
11.5.3	392821	160	Systematic Capacity-Based Risk Assessment: A	sessiondetail_392821	paper	Thu	20	11:30	12:10	
	392698		Lunch	sessiondetail_392698	break	Thu	20	12:00	13:30	
P4	392940		Space Weather: Understanding and Mitigating	sessiondetail_392940	keynote	Thu	20	13:30	14:30	
	392842		Networking Reception	sessiondetail_392842	socialEvents	Thu	20	15:30	16:30	



techprogram__description	techprogram__track	techprogram__idTrack	techprogram__room	techprog	techprogram__level	success
Alan Harding, Christine Kowalski			L1	Open	Ground Level	1
Alan Harding, Christine Kowalski			L2	Open	Ground Level	
			Hall L Foyer	Open	Ground Level	
			Hall L Foyer	Open	Ground Level	
			Hall L Foyer	Open	Ground Level	
Mike Pennotti			Riverbank 1	Closed	Lower Level	
Mike Pennotti			Riverbank 1	Closed	Lower Level	
			L1	Open	Ground Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
Bob Swarz, Zane Scott			Panorama 1&2	Closed	Upper Level	
Mike Pennotti			Riverbank 1	Closed	Lower Level	
Duncan Kemp (Ministry of Defence); Sam Williams (MoD)	A.2	205	Riverbank 4	Open	Lower Level	
Sarah Sheard (Software Engineering Institute)	A.3	206	Riverbank 3	Open	Lower Level	
Angela Robinson (INCOSE VSE Working Group)	A.4	207	Riverbank 2	Open	Lower Level	
Mike Celentano			Riverbank 8	Closed	Lower Level	
Frederic Autran			City Room 2	Closed	Upper Level	
			Riverbank Foyer	Open	Lower Level	
Antony Williams			City Room 1	Closed	Upper Level	
Kerry Lunney			City Room 3	Open	Upper Level	
Jean Claude Roussel			City Room 4	Closed	Upper Level	
			Riverbank Foyer	Open	Lower Level	
Mike Celentano			Riverbank 8	Closed	Lower Level	
Ariela Sofer			Riverbank 7	Open	Lower Level	
Tom Stranberg			City Room 3	Closed	Upper Level	
Mark Wilson, Nicole Hutchison			Riverbank Board Room	Open	Lower Level	
Bob Swarz			City Room 1	Open	Upper Level	
Bob Swarz			Riverbank 6	Open	Lower Level	
Bill Schindel			City Room 4	Open/W	Upper Level	
Elizabeth Clark (Software Metrics Inc); Angela Tuffley (RedBay Consulting Pty Ltd); Shari Soutberg (University of New South Wales - Capability Systems Centre)	C.4	207	Riverbank 2	Open	Lower Level	
			Riverbank Foyer	Open	Lower Level	
Bob Swarz, Zane Scott			Panorama 1&2	Open	Upper Level	
			National Wine Center	Open		
			L1	Open	Ground Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
Courtney Wright			Riverbank 8	Closed	Lower Level	
Rick Dove	E.2	209	Riverbank 4	Open	Lower Level	
Anand Kumar (Tata Research Development and Design Centre); James Martin (Aerospace Corporation); Jean-Luc Garnier (Thales Corporation)	E.3	210	Riverbank 3	Open	Lower Level	
Aurelijus Morkevicius (No Magic Europe); Barry Papke (No Magic USA)	E.4	211	Riverbank 2	Open	Lower Level	
Mark Powell (Attwater Consulting)	E.5	212	Riverbank 1	Open	Lower Level	
Alan Harding, Christine Kowalski			Hall L	Open	Ground Level	
			Riverbank Foyer	Open	Lower Level	
Dorothy McKinney			City Room 3	Closed	Upper Level	
Frederic Autran			City Room 2	Closed	Upper Level	
Alan Harding, Christine Kowalski			City Room 1	Closed	Upper Level	
			Riverbank Foyer	Open	Lower Level	
Mark Wilson, Jaci Pratt			Riverbank Board Room	Open	Lower Level	
Bill Schindel			City Room 4	Open/W	Upper Level	
Judith Dahmann			City Room 3	Open/W	Upper Level	
Moderator: Regina Griego (Sandia National Laboratories) Panelists: Heidi Hahn (Los Alamos National Laboratory); Tim Ferris (Cranfield University); Clifford Whitcomb (Naval Postgraduate School)	G.1	208	Riverbank 5	Open	Lower Level	
Mark Winstead, Daryl Hild, Michael McEvilley (The MITRE Corporation)	G.5	212	Riverbank 1	Open	Lower Level	
Muhammad F Islam			Riverbank 6	Open	Lower Level	
			Riverbank Foyer	Open	Lower Level	
Moderator: Richard Adcock (Cranfield University) Panelists: Don Gelosh (Worcester Polytechnic Institute); Larry Strawser (Retired); Klew Williams (Worcester Polytechnic Institute); Jon Wade, Nicole Hutchison (Stevens Institute of Technology)	H.1	208	Riverbank 5	Open	Lower Level	
Alice Squires, Regina Griego			City suite Foyer	Open	Upper Level	
			L1	Open	Ground Level	
cecilia haskins			City Room 4	Open/W	Upper Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
AVM Mel Hupfeld (Head of Force Design - Australian Defence)	P1	213	Hall L	Open	Ground Level	
			Hall F-G	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Angela Robinson			City Room 4	Open/W	Upper Level	
Sarah Sheard			City Room 1	Open/W	Upper Level	
Art Hyde			City Room 2	Open/W	Upper Level	
Moderator: Lonnie Vanzandt (Sodius) Panelists: Len Wozniak (General Motors); John Baras (University of Maryland); Bill Chown (Mentor Graphics); Manas Bajaj (Intercax)	1.1	213	Hall L	Open	Ground Level	
Jaci M Pratt (Defence Science and Technology Group); Stephen Cook (The University of Adelaide)	1.2.1	214	Riverbank 6	Open	Lower Level	
Don Gelosh (Worcester Polytechnic Institute); Mimi Heisey (Lockheed Martin Corporation); John Snoderly (Defense Acquisition University); Kenneth Nidiffer (Software Engineering Institute)	1.3.1	215	Riverbank 5	Open	Lower Level	
Mike Wilkinson, Simon Jewell (Niteworks)	1.4.1	216	Riverbank 4	Open	Lower Level	
Tina P. Srivastava (MIT Aeronautics and Astronautics Engineering); Jean-Claude Roussel, Gary R. Smith (Airbus Group)	1.5.1	217	Riverbank 3	Open	Lower Level	
Dr Jon Wade (Stevens Institute of Technology)	1.6.1	218	Riverbank 2	Open	Lower Level	
Nicole Hutchison	1.9	239	Riverbank 1	Open	Lower Level	
	1.8.2	203	Exhibitor theater	Open	Ground Level	
Stephen Cook (Shoal Engineering & University of Adelaide); Mark Unewisse (Department of Defence)	1.2.2	214	Riverbank 6	Open	Lower Level	
Kyoko Watanabe, Yoshikazu Tomita, Kanenori Ishibashi, Makoto Ioki, Seiko Shirasaka (Keio University Graduate School of System Design and Management)	1.3.2	215	Riverbank 5	Open	Lower Level	
Joseph Bradley (Leading Change, LLC); Eric Kristoff (UMUC)	1.4.2	216	Riverbank 4	Open	Lower Level	
Jimmie McEver (JHU Applied Physics Laboratory)	1.5.2	217	Riverbank 3	Open	Lower Level	
David Long (Vitech Corporation)	1.6.2	218	Riverbank 2	Open	Lower Level	
	1.8.3	203	Exhibitor theater	Open	Ground Level	
Ramakrishnan Raman (Honeywell Technology Solutions Lab); Meenakshi D'Souza (International Institute Of Information Technology Bangalore)	1.2.3	214	Riverbank 6	Open	Lower Level	
G.Maarten Bonnema (University of Twente)	1.3.3	215	Riverbank 5	Open	Lower Level	
Rick Dove (Paradigm Shift International); Bill Schindel (ICTT System Sciences); Mark Kenney (Northrop Grumman)	1.4.3	216	Riverbank 4	Open	Lower Level	
Gina Guillaume-Joseph (The MITRE Corporation)	1.5.3	217	Riverbank 3	Open	Lower Level	
Courtney Wright (INCOSE)	1.6.3	218	Riverbank 2	Open	Lower Level	
			Hall F-G	Open	Ground Level	
			Riverbank 7-8	Open	Lower Level	
Don Gelosh			City Room 3	Open/W	Upper Level	
Michael deLamare			City Room 4	Open/Ou	Upper Level	
Hugo Guillermo Chalé			City Room 2	Open/W	Upper Level	
Aurelijus Morkevicius, Aiste Aleksandraviciene, Donatas Mazeika (No Magic Europe); Lina Tutkute (Kaunas University of Technology); Zilvinas Strolia (No Magic Europe)	2.1.1	213	Hall L	Open	Ground Level	
Hillary Sillitto (Sillitto Enterprises); Dov Dori (Technion - Israel Institute of Technology); Regina Griego (Sandia National Laboratories); Scott Jackson (Burnham Systems Consulting); Daniel Krob (President at CESAMES); Patrick Godfrey (Systems Thinking); Eileen Arnold (Retired); James Martin (The Aerospace Corporation); Dorothy McKinney (Considered Thoughtfully)	2.2.1	214	Riverbank 6	Open	Lower Level	
Nicole Hutchison, Jon Wade (Stevens Institute of Technology)	2.3.1	215	Riverbank 5	Open	Lower Level	
Anders Roe Nykaas, Yang-Yang Zhao (University College of South-East Norway)	2.4.1	216	Riverbank 4	Open	Lower Level	
Gregory S. Parnell (University of Arkansas); Frank Salvatore (Engility Corporation)	2.5.1	217	Riverbank 3	Open	Lower Level	
Cecilia Haskins (NTNU)	2.6.1	218	Riverbank 2	Open	Lower Level	
	2.8.1	203	Exhibitor theater	Open	Ground Level	
Nicole Hutchison	2.9	239	Riverbank 1	Open	Lower Level	
Meaghan O'Neil			City Room 1	Closed	Upper Level	
	2.8.2	203	Exhibitor theater	Open	Ground Level	
Manas Bajaj (Intercax); Jonathan Backhaus, Timothy Walden (Lockheed Martin); Manoj Waikar, Dirk Zwemer (Intercax); Chris Schreiber, Ghassan Issa (Lockheed Martin)	2.1.2	213	Hall L	Open	Ground Level	
Joseph Bradley (Leading Change, LLC); Mahmoud Efatmaneshnik, Keith Joiner (UNSW Canberra at ADFA); Charles Keating (Old Dominion University)	2.2.2	214	Riverbank 6	Open	Lower Level	
Clifford Whitcomb, Rabia Khan (Naval Postgraduate School); Corina White (NAVAIR); Dana Grambow (Office of Personnel Management); Jose Velez (DASN RDT&E); Jessica Delgado (Naval Surface Warfare Center Dahlgran Division)	2.3.2	215	Riverbank 5	Open	Lower Level	
Lars Petter Bryn (HSN); Gerrit Muller (Buskerud and Vestfold University College)	2.4.2	216	Riverbank 4	Open	Lower Level	
Mia Zager, Cindy Chen (Shell Technology Center); Paul Schreinemakers (How2SE)	2.5.2	217	Riverbank 3	Open	Lower Level	
Duncan Kemp (Ministry of Defense)	2.6.2	218	Riverbank 2	Open	Lower Level	

			Hall F-G	Open	Ground Level	
Bill Schindel			City Room 4	Open/W(	Upper Level	
Barclay Brown, Larry Kennedy			City Room 1	Open/W(	Upper Level	
Rick Dove			City Room 2	Open/W(	Upper Level	
Michael Kretzenbacher (Institut Sup); Caroline Lange (German Aerospace Center (DLR)); David Harvey (Shoal)	3.1.1	213	Hall L	Open	Ground Level	
Moderator: David Harvey (Shoal Engineering) Panelists: Sin Hin Oh (Land Transport Authority, Singapore); Eric Burgers (Independent entrepreneur); Quoc Do (Frazer Nash Consultancy); Shaun Wilson (Shoal Engineering); Ronald Kratzke (Vitech Corporation)	3.2	214	Riverbank 6	Open	Lower Level	
Klew Williams, Alexandrina Agloro, Shamsnaz S. Virani (Worcester Polytechnic Institute)	3.3.1	215	Riverbank 5	Open	Lower Level	
Simen Bergli, Kristin Falk (University College of Southeast Norway (NISE))	3.4.1	216	Riverbank 4	Open	Lower Level	
John Panek (Northrop Grumman Corporation)	3.5.1	217	Riverbank 3	Open	Lower Level	
Prof Patrick Godfrey (Systems Thinking)	3.6.1	218	Riverbank 2	Open	Lower Level	
Robert Malone, John Herrold, Brittany Friedland, Gregory Green (Boeing)	3.1.2	213	Hall L	Open	Ground Level	
Richard Turner (Stevens Institute); Doug Bodner (Goergia Institute of Technology); Duncan Kemp (UK Ministry of Defence); Yvette Rodriguez (Defense Acquisition University); Jon Wade, Peizhu Zhang (Stevens Institute)	3.3.2	215	Riverbank 5	Open	Lower Level	
Kristian Frøvold (KM); Gerrit Muller (Buskerud and Vestfold University College); Michael Pennotti (Stevens Institute of Technology)	3.4.2	216	Riverbank 4	Open	Lower Level	
Richard Fullalove (Transport for NSW)	3.5.2	217	Riverbank 3	Open	Lower Level	
Dr. Tina Srivastava (Gigavation & MIT)	3.6.2	218	Riverbank 2	Open	Lower Level	
	3.8.3	203	Exhibitor theater	Open	Ground Level	
			Hall F-G	Open	Ground Level	
			L1	Open	Ground Level	
cecilia haskins			City Room 4	Open/W(	Upper Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
Dr Tomohiko Taniguchi (Special adviser to the cabinet of Prime Minister Shinzo AbeProfessor at Keio University Graduate School of System Design and Management)	P2	220	Hall L	Open	Ground Level	
			Hall F-G	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Courtney Wright			City Room 2	Closed	Upper Level	
David Long			City Room 1	Closed	Upper Level	
John Brtis			City Room 4	Open/W(	Upper Level	
Carl Gamble, John Fitzgerald (Newcastle University); Richard Payne, Benjamin Lam (Newcastle Univeristy)	4.1.1	220	Hall L	Open	Ground Level	
Christian Webel (Fraunhofer IESE); Rainer Steglich (N.A.)	4.2.1	221	Riverbank 6	Open	Lower Level	
Moderator: James Martin (The Aerospace Corporation) Panelists: Stephen Cook (University of Adelaide); Tim Ferris (Cranfield University); Anand Kumar (Tata Consultancy Services); David Rousseau (Pres, Intl Soc Sys Sci); Rick Dove (Paradigm Shift Intl)	4.3	222	Riverbank 5	Open	Lower Level	
Yisug Kwon (UTC); Nancy Leveson (MIT)	4.4.1	225	Riverbank 4	Open	Lower Level	
Hugo Guillermo Chalé (ALSTOM Transport); Francois Greugny (Acuity Solutinos)	4.5.1	223	Riverbank 3	Open	Lower Level	
Stephane Bonnet, Jean-Luc Voirin, V Normand, Daniel Exertier (Thales)	4.6.1	224	Riverbank 2	Open	Lower Level	
	4.7.1	200	Sponsor Theater	Open	Ground Level	
	4.8.1	201	Exhibitor theater	Open	Ground Level	
Nicole Hutchison	4.9	240	Riverbank 1	Open	Lower Level	
Lonnie Vanzandt (Predictable Response Consulting)	4.6.2	224	Riverbank 2	Open	Lower Level	
	4.8.2	201	Exhibitor theater	Open	Ground Level	
Thomas Bransden, Quoc Do, Damien Farrell, Stuart Taylor (Frazer-Nash Consultancy Ltd)	4.1.2	220	Hall L	Open	Ground Level	
Perri Nejib (Northrop Grumman); Dawn Beyer (Lockheed Martin); Ed Yakabovicz (Northrop Grumman); Ken Kepchar (Eagleview Associates); Michael Mcevilley (Mitre)	4.2.2	221	Riverbank 6	Open	Lower Level	
Sarah Sheard (Software Engineering Institute); Michael Konrad, Charles Weinstock, William Nichols (SEI)	4.4.2	225	Riverbank 4	Open	Lower Level	
Bobbi Young (Raytheon Company); Paul Clements (BigLever Software, Inc.)	4.5.2	223	Riverbank 3	Open	Lower Level	
	4.7.3	200	Sponsor Theater	Open	Ground Level	
	4.8.3	201	Exhibitor theater	Open	Ground Level	
Peter Sjoberg (Volvo CE); Lars-Olof Kihlstr (Syntell AB); Matthew Hause (PTC)	4.1.3	220	Hall L	Open	Ground Level	
Adrien Monsimer (Safran Helicopter Engines); Jean-Charles Mar (Institut Cl); Pierre Sicaire (Safran Helicopter Engines)	4.2.3	221	Riverbank 6	Open	Lower Level	
Leonard Petnga (Institute for Systems Research - University of Maryland); Mark Austin (University of Maryland); Mark Blackburn (Stevens Institute of Technology)	4.4.3	225	Riverbank 4	Open	Lower Level	
Charles Krueger, Paul Clements (BigLever Software, Inc.)	4.5.3	223	Riverbank 3	Open	Lower Level	
Toshihiro Obata, Shinichi Nakasuka (The University of Tokyo)	4.6.5	224	Riverbank 2	Open	Lower Level	
			Hall F-G	Open	Ground Level	
Jason Sohlke			City Room 1	Closed	Upper Level	
Larry Strawser, Ariela Sofer			City Room 4	Open	Upper Level	
Rick Dove			City Room 2	Open/W(	Upper Level	
Matthew Hause (PTC)	5.1.1	220	Hall L	Open	Ground Level	
Richard Beasley (Rolls-Royce plc); Andrew Pickard (Rolls-Royce Corporation); Andrew Nolan (Rolls-Royce plc)	5.2.1	221	Riverbank 6	Open	Lower Level	
Jennifer Stevens (NASA)	5.3.1	222	Riverbank 5	Open	Lower Level	
Brett Morris (Defence Science and Technology Group); Stephen Cook (The University of Adelaide)	5.4.1	225	Riverbank 4	Open	Lower Level	
Lilanthi Balasingham (Parsons Brinckerhoff); Anne Oneil (Anne O'Neil Consultants LLC); Alex Ryan (MaRS Solutions Lab); Craig Moran (Roads and Maritime Services, Gvt. of NSW); Marcus Burke (Australian National Transport Commission); Niels De Boer (CETRAN); Carla Bailo (Mobility Research, Ohio State University); Mark Fusco (Advanced Focus); Carl Liersch (Robe	5.5	223	Riverbank 3	Open	Lower Level	
Jon Wade (SERC/Stevens Institute of Technology); Steven Hoffenson (Stevens Institute of Technology); Hortense Gerardo (Lasell College)	5.6.1	224	Riverbank 2	Open	Lower Level	
	5.7.1	200	Sponsor Theater	Open	Ground Level	
Nicole Hutchison	5.9	240	Riverbank 1	Open	Lower Level	
Kesav Vithal Nori (IIIT Hyderabad); Anand Kumar, Swaminathan Natarajan (TCS Research)	5.6.2	224	Riverbank 2	Open	Lower Level	
	5.8.2	201	Exhibitor theater	Open	Ground Level	
Quoc Do (Frazer Nash Consult); Daniel Hartigan (Department of Defence)	5.1.2	220	Hall L	Open	Ground Level	
Timothy L. Ferris, Stephen Barker (Cranfield University)	5.2.2	221	Riverbank 6	Open	Lower Level	
Dale Brown (INCOSE); Chamara Johnson (WSP-Parsons Brinckerhoff)	5.3.2	222	Riverbank 5	Open	Lower Level	
Victoria Jnitova, Sondoss Elsawah, Michael Ryan (unsw@adfa)	5.4.2	225	Riverbank 4	Open	Lower Level	
Dr. Mike Yokell (Lockheed Martin Aeronautics)	5.7.3	200	Sponsor Theater	Open	Ground Level	
	5.8.3	201	Exhibitor theater	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Mark Wilson, Nicole Hutchison			Riverbank Board Room	Open	Lower Level	
Dorothy McKinney			City Room 3	Closed	Upper Level	
Jon Wade (Stevens Institute)	6.1	220	Hall L	Open	Ground Level	
Li Qiao, Michael Ryan (UNSW Canberra)	6.2.1	221	Riverbank 6	Open	Lower Level	
Gary Langford (Portland State University)	6.3.1	222	Riverbank 5	Open	Lower Level	
Charles Keating, Polinpapilinho Katina (Old Dominion University); Ra'Ed Jaradat (Mississippi State University); Joseph Bradley (Old Dominion University)	6.4.1	225	Riverbank 4	Open	Lower Level	
Lilanthi Balasingham (Parsons Brinckerhoff); Anne Oneil (Anne O'Neil Consultants LLC); Alex Ryan (MaRS Solutions Lab); Craig Moran (Roads and Maritime Services, Gvt. of NSW); Marcus Burke (Australian National Transport Commission); Niels De Boer (CETRAN); Carla Bailo (Mobility Research, Ohio State University); Mark Fusco (Advanced Focus); Carl Liersch (Robe	6.5	223	Riverbank 3	Open	Lower Level	
Andrew Flahive (DST Group); Jakobsson (Retired, DST Group); Donald Lowe, Mark Unewisse (DST Group)	6.6.1	224	Riverbank 2	Open	Lower Level	
	6.8.1	201	Exhibitor theater	Open	Ground Level	
Yoshikazu Tomita, Kyoko Watanabe, Seiko Shirasaka, Takashi Maeno (Keio University)	6.6.2	224	Riverbank 2	Open	Lower Level	
Li Qiao, Mahmoud Efatmaneshnik, Michael Ryan (UNSW Canberra)	6.2.2	221	Riverbank 6	Open	Lower Level	
Obaid Ur Rehman (UNSW Canberra); Keith Joiner (UNSW, Capabillty Systems Centre)	6.3.2	222	Riverbank 5	Open	Lower Level	
Scott Simmonds (UniSA); Stephen Cook (University of Adelaide)	6.4.2	225	Riverbank 4	Open	Lower Level	
Anitha Jayapalan (Dayananda Sagar Academy of Technology & Management)	6.6.3	224	Riverbank 2	Open	Lower Level	
	6.8.3	201	Exhibitor theater	Open	Ground Level	
Alex Gorod, Leonie Hallo, Tiep Nguyen (The University of Adelaide)	6.6.4	224	Riverbank 2	Open	Lower Level	
			Hall F-G	Open	Ground Level	
			Riverbank Foyer	A, C, ESEI	Lower Level	
			L1	Open	Ground Level	
cecilia haskins			City Room 4	Open/Ou	Upper Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
Paul Nielsen (Director & CEO - Software Engineering Institute, Carnegie Mellon University)	P3	226	Hall L	Open	Ground Level	
			Hall F-G	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Courtney Wright			City Room 2	Closed	Upper Level	
Kevin Devaney, James Johnson (SRC, Inc.)	7.1.1	226	Hall L	Open	Ground Level	
Andrew Battigaglia, Erika Brimhall, Terry Ogle (Georgia Tech Research Institute)	7.2.1	227	Riverbank 6	Open	Lower Level	
James Armstrong (Stevens Institute of Technology)	7.3.1	228	Riverbank 5	Open	Lower Level	
Oliver Hoehne (Sr. Engineering Manager)	7.4.1	229	Riverbank 4	Open	Lower Level	
Hugo Guillermo Chalé (ALSTOM Transport); Juan Llorens (Universidad Carlos III de Madrid); Elena Gallego (The REUSE Company)	7.5.1	230	Riverbank 3	Open	Lower Level	
	7.8.1	202	Exhibitor theater	Open	Ground Level	
Nicole Hutchison	7.9	241	Riverbank 1	Open	Lower Level	
Joseph Kasser (The Right Requirements); Yang Yang Zhao (University College of Southeast Norway)	7.6.2	231	Riverbank 2	Open	Lower Level	
	7.8.2	202	Exhibitor theater	Open	Ground Level	
Joseph Marvin, Garth Bailey (Prime Solutions Group, Incorporated)	7.1.2	226	Hall L	Open	Ground Level	
Anand Kumar, Nikhil Zope, Doji Lokku, Jose Reddypogu (TCS Research)	7.2.2	227	Riverbank 6	Open	Lower Level	
Frank Lui, Donald Lowe, Andrew Flahive, Hossein Seif Zadeh (DST Group)	7.3.2	228	Riverbank 5	Open	Lower Level	
Emmy Hultgren, Lena Karlsson Johansson (Tetra Pak Packaging Solutions)	7.4.2	229	Riverbank 4	Open	Lower Level	

Brittany Friedland, John Herrold, Glendora Ferguson, Robert Malone (Boeing)	7.5.2	230	Riverbank 3	Open	Lower Level	
	7.8.3	202	Exhibitor theater	Open	Ground Level	
Obaid Ur Rehman, Michael Ryan, Mahmoud Efatmaneshnik (UNSW Canberra)	7.1.3	226	Hall L	Open	Ground Level	
Arnesh Telukdarie (University of Johannesburg); Shingai A. Maunzagona (university of johannesburg)	7.2.3	227	Riverbank 6	Open	Lower Level	
Andrew Gray (BMT Hi-Q Sigma Ltd.); Dr Adrian James (UCL Australia); Helen Nasser (WSP Parsons Brinkerhoff); Ken Richardson (Roke Manor Research Ltd.); Kate Rooke (PA Consulting Group)	7.3.3	228	Riverbank 5	Open	Lower Level	
Matthew Hause (PTC)	7.4.3	229	Riverbank 4	Open	Lower Level	
Richard Beasley (Rolls-Royce plc)	7.5.3	230	Riverbank 3	Open	Lower Level	
Jun-Yeong Kim (GEM, POSTECH); Daegeun Hong (GEM,POSTECH); Suk-Hwan Suh (GEM, POSTECH)	7.6.5	231	Riverbank 2	Open	Lower Level	
	7.8.4	202	Exhibitor theater	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Duncan Kemp (UK Ministry Of Defence); Jim Kennedy (Asset Management Group); Steve Ashfield (Nova Systems); Anne O'Neil (Anne O'Neil Consultants LLC); Eric Burgers (Semapro)	8.1	226	Hall L	Open	Ground Level	
James Martin (Aerospace Corporation)	8.2.1	227	Riverbank 6	Open	Lower Level	
William Schindel (ICTT System Sciences)	8.3.1	228	Riverbank 5	Open	Lower Level	
Muhammad Islam, Gina Guillaume-Joseph, Al Wong, Subash Kafle, Deanthony Heart (MITRE)	8.4.1	229	Riverbank 4	Open	Lower Level	
Gary Arabian, Edward Chan (Transport for NSW)	8.5.1	230	Riverbank 3	Open	Lower Level	
Kenneth Kepchar (EagleView Associates LLC)	8.6.1	231	Riverbank 2	Open	Lower Level	
	8.8.1	202	Exhibitor theater	Open	Ground Level	
Nicole Hutchison	8.9	241	Riverbank 1	Open	Lower Level	
Michael Ryan (UNSW Canberra); Louis Wheatcraft (Requirements Experts)	8.6.2	231	Riverbank 2	Open	Lower Level	
Sonia Ben Hamida (Ecole Centrale Paris); Marija Jankovic (CentraleSupelec)	8.2.2	227	Riverbank 6	Open	Lower Level	
Brian Naude, Charl Petzer (Council for Scientific and Industrial Research)	8.3.2	228	Riverbank 5	Open	Lower Level	
Heidi Hahn (hahn@lanl.gov); Barbara Lynn (LANL)	8.4.2	229	Riverbank 4	Open	Lower Level	
Kurt Azevedo, Daniel Olsen (Colorado State University)	8.5.2	230	Riverbank 3	Open	Lower Level	
Mahmoud Efatmaneshnik (UNSW Canberra at ADFA); Shraga Shoval (Ariel University); Michael Ryan (UNSW- Canberra)	8.6.3	231	Riverbank 2	Open	Lower Level	
	8.8.3	202	Exhibitor theater	Open	Ground Level	
Raka Mitra (Honeywell)	8.6.4	231	Riverbank 2	Open	Lower Level	
			Hall F-G	Open	Ground Level	
Mark Wilson, Nicole Hutchison			Riverbank Board Room	Open	Lower Level	
Holly Witte			City Room 1	Closed	Upper Level	
Bill Chown			City Room 2	Open	Upper Level	
Matthew Dent (Frazer-Nash Consultancy)	9.1.1	226	Hall L	Open	Ground Level	
Tom McDermott (Georgia Tech Research Institute); Alejandro Salado (Virginia Tech)	9.2.1	227	Riverbank 6	Open	Lower Level	
Colin Small, Gregory Parnell, Ed Pohl, Bobby Cottam, Eric Specking, Zephan Wade (University of Arkansas)	9.3.1	228	Riverbank 5	Open	Lower Level	
Moderator: Regina Griego (Sandia National Laboratories) Panelists: Heidi Hahn (Los Alamos National Laboratories); Lauren Stolzar (BAE Systems, Inc.); Stephanie Chiesi (Raytheon Missile Systems); Alice Squires (Washington State University)	9.4	229	Riverbank 4	Open	Lower Level	
Anne O'Neil (Anne O'Neil Consultants LLC); Grant Burton (Sydney Trains); Len Niest (Public Transport Victoria); Michael Salvato (NY MTA); William Gleckler (New York City Transit)	9.5	230	Riverbank 3	Open	Lower Level	
William Scott (SMART, University of Wollongong); Vu Lam Cao (SMART INFRASTRUCTURE FACILITY); Ricardo Peculis (University of Wollongong); Peter Campbell (INCOSE)	9.6.1	231	Riverbank 2	Open	Lower Level	
Jinzhi Lu (kth Royal Institute of Technology); Junjie Tang (Beijing Institute of Astronautical System Engineering,); Didem G, Martin Torngren (Department of Machine Design, Mechatronics Unit, KTH-Royal Institute of Technology)	9.6.2	231	Riverbank 2	Open	Lower Level	
Erika Palmer, Benedicte S Wilson (University of Bergen)	9.1.2	226	Hall L	Open	Ground Level	
Ross Arnold (U.S. Army); Jon Wade (Stevens Institute of Technology)	9.2.2	227	Riverbank 6	Open	Lower Level	
Aldaine Whyte (University of Pretoria); Louwrence Erasmus (University of Johannesburg)	9.3.2	228	Riverbank 5	Open	Lower Level	
Louis Wheatcraft (Requirements Experts); Michael Ryan (UNSW Canberra); Carl Svensson (Swedish Defense Materiel Administration)	9.6.3	231	Riverbank 2	Open	Lower Level	
Louis Wheatcraft (Requirements Experts); Carl Svensson (Swedish Defense Materiel Administration); Michael Ryan (UNSW Canberra)	9.6.4	231	Riverbank 2	Open	Lower Level	
			Panorama Ballroom	Open	Upper Level	
			L1	Open	Ground Level	
cecilia haskins			City Room 4	Open/Wa	Upper Level	
			Foyer F	Open	Ground Level	
			Foyer F	Open	Ground Level	
			L1	Open	Ground Level	
Courtney Wright			City Room 2	Closed	Upper Level	
Jonette Stecklein (NASA)	10.1.1	233	Hall L	Open	Ground Level	
Peter Campbell (INCOSE); William Palazzi (Palazzirail); Warwick Talbot (Sydney Trains); Bradley Moorhouse (Austrlian Rail Track Corporation); Simon Foster (Office of the National Rail Safety Regulator); Len Neist (Public Transport Victoria)	10.2	234	Riverbank 6	Open	Lower Level	
Moderator: Ed Pohl (University of Arkansas) Panelists: Greg Parnell (Department of Industrial Engineering); Stephen Cook (University of South Australia, Adelaide); Tim Ferris (Cranfield University); Simon Georger (Engineer Research and Development Center)	10.3	235	Riverbank 5	Open	Lower Level	
Jessica Knizhnik (NASA Goddard Space Flight Center); Mark Austin (University of Maryland); Craig Carignan (NASA Goddard Space Flight Center)	10.4.1	236	Riverbank 4	Open	Lower Level	
Kristy Hudson, Sondoss Elsawah (University of New South Wales Canberra); Michael Ryan (UNSW Canberra)	10.5.1	237	Riverbank 3	Open	Lower Level	
Duncan Kemp (Ministry of Defence); Meaghan Oneil (System Design and Strategy)	10.6.1	238	Riverbank 2	Open	Lower Level	
Ken Ptack (J&K Consulting)	10.1.2	233	Hall L	Open	Ground Level	
Donald Lowe (Defence Science and Technology Group)	10.4.2	236	Riverbank 4	Open	Lower Level	
Joshua Bowers, Sondoss Elsawah, Michael Ryan (University of New South Wales Canberra)	10.5.2	237	Riverbank 3	Open	Lower Level	
Pavel Fomin (INCOSE WMA); William Scheible, Gina Guillaume-Joseph (The MITRE Corporation)	10.6.2	238	Riverbank 2	Open	Lower Level	
			Hall F-G	Open	Ground Level	
			Hall F-G	Open	Ground Level	
Mike Wilkinson			City Room 4	Open/Wa	Upper Level	
David Flanigan (The Johns Hopkins University Applied Physics Laboratory)	11.1.1	233	Hall L	Open	Ground Level	
Donald York (INCOSE); Marc Austin (Department of Defense); Cheyne Homberger, George Polacek, Virginia Ahalt, Erin Doolittle (US DoD)	11.2.1	234	Riverbank 6	Open	Lower Level	
Ian Gibson (Jacobs); Thomas Riley (Thales)	11.3.1	235	Riverbank 5	Open	Lower Level	
Zane Scott (Vitech Corporation)	11.4.1	236	Riverbank 4	Open	Lower Level	
Ronald Carson (Seattle Pacific University)	11.5.1	237	Riverbank 3	Open	Lower Level	
Mike Celentano (Roche); Rick Dove (Paradigm Shift International); Meaghan O'Neil (The Math Works); Christophe Waterplas (ResMed Ltd); Edmund Kienast (Australian Digital Health Agency)	11.6	238	Riverbank 2	Open	Lower Level	
Karen Weiland (NASA Glenn Research Center); Jon Holladay (NASA Engineering and Safety Center)	11.1.2	233	Hall L	Open	Ground Level	
Regina Griego, Richard Craft (Sandia National Laboratories)	11.2.2	234	Riverbank 6	Open	Lower Level	
Andy Nolan, Olimpia Vlad (Rolls-Royce plc); Andrew Pickard (Rolls-Royce Corporation); Richard Beasley (Rolls-Royce plc)	11.3.2	235	Riverbank 5	Open	Lower Level	
Louwrence Erasmus (University of Johannesburg); Braam Greeff (Council for Scientific and Industrial Research)	11.4.2	236	Riverbank 4	Open	Lower Level	
Steve Dennehy (SKA South Africa); Isabel Meyer (Impact Advantage)	11.5.2	237	Riverbank 3	Open	Lower Level	
Alan Harding, Christine Kowalski			City Room 1	Closed	Upper Level	
Obaid Ur Rehman, Michael Ryan (UNSW Canberra)	11.1.3	233	Hall L	Open	Ground Level	
Clark Owens III (NASA)	11.2.3	234	Riverbank 6	Open	Lower Level	
Barry Papke, Saulius Pavalkis (No Magic); Gan Wang (BAE Systems)	11.3.3	235	Riverbank 5	Open	Lower Level	
Bryan O'Halloran (Naval Postgraduate School); Nikolaos Papakonstantinou (VTT Technical Research Centre of Finland); Kristin Giammarco (Naval Postgraduate School); Douglas Van Bossuyt (KTM Research)	11.4.3	236	Riverbank 4	Open	Lower Level	
Luna Magpili (Washington State University); Ariel Pinto (ODU); Gnana Bharathy (Office of Environment and Hertitag (NSW)); Mohammed Babiker (Green Wayira)	11.5.3	237	Riverbank 3	Open	Lower Level	
			Hall F-G	Open	Ground Level	
Bill Murtagh (National Oceanic and Atmospheric Administration (NOAA))	P4	233	Hall L	Open	Ground Level	
			Hall L Foyer	Open	Ground Level