	Tuesday 8 November 2011 - Science & Technology						
0730-0830	Registration and Coffee	Crowne Plaza breakout area (top floor)					
0830-0845	Welcome	RADM Peter Clarke RAN Rtd - Master of Ceremonies; and Mr Peter Horobin MBE FAICD - President, SIA					
Session 1: De	Session 1: Defence Science and Technology Organisation (DSTO and Defence And Systems Institute (DASI)						
0845-0905	Trends in Autonomous Underwater Vehicles	Professor Anthony Finn - DASI					
0910-0930	The Requirements for Defence S&T in the FSM Program	Dr David Kershaw - Research Leader, Submarines, DSTO					
0935-0955	Submarine Support - Lessons Learned the Hard Way	Mr Jock Thornton - DASI					
0955-1015	Morning Coffee Break: Sponsored by <u>IMAGINit Technologies</u> Pty Ltd	Crowne Plaza breakout area					
1015-1035	Systems Engineering - the Key to Successful Submarine Building	Professor Stephen Cook - DASI					
1040-1100	Test & Evaluation and Trials Management - Timing is Everything	Dr Vivian Crouch - DASI					
1105-1125	Networked Subsea Communications - MASQ - Developments, Applications, Results	Mr Paul Roberts - Project Manager, L-3 Communications Nautronix Ltd					
1130-1150	Designing and Building Australia's Future Submarine	Mr Jim Duncan - Representing ThyssenKrupp Marine Systems					
1155-1210	Questions & Answers	Master of Ceremonies and Speakers from Session 1					
1210-1310	Lunch sponsored by Saab Systems Pty Ltd	Crowne Plaza breakout area					
Session 2: Ac	ademia and Industry						
1310-1330	Recent Developments in Submarine Vibration Isolation and Noise Control	Dr Carl Howard - University of Adelaide School of Mechanical Engineering					
1335-1355	Developments in Compression Ignition Engines	Dr Manfred Zockel - University of Adelaide School of Mechanical Engineering					
1400-1420	Experimental and Computational Investigation into the	Professor Dev Ranmuthugala - Australian Maritime College (AMC),					
	Hydrodynamics of Conventional Submarines	Launceston, Tas					
1425-1445	Afternoon Coffee Break: Sponsorship opportunity	Crowne Plaza breakout area					
1445-1505	Submarine Energy and Propulsion Considerations	Mr David Williams - Engineer, Deep Blue Tech Pty Ltd					
1510-1540	Passive Target Motion Analysis from Bearings and Multipath Time Delay Measurements	Ms Laleh Badriasl - PhD Student, School of Electrical and Information Engineering, University of SA					
1535-1555	Questions & Answers	Master of Ceremonies and Speakers from Session 2					
1600-1620	Expert Panel Discussion	Presenters from Day 1					
1620-1625	Closing Comments - Day 1	Mr Peter Horobin - President, Submarine Institute of Australia					
1645-1715	Opportunity to inspect Anechoic Chamber and other related facilities	University of Adelaide (tbc)					
1830-2030	Opening Cocktail Party sponsored by MacTaggart Scott Australia Pty Ltd	Crowne Plaza breakout area					

	Wednesday 9 November 2011 - Plenary Session					
0745-0845	Registration and Coffee	Crowne Plaza breakout area (top floor)				
0845-0900	Welcome	RADM Peter Clarke RAN Rtd - Master of Ceremonies; and				
0043-0900	vveicome	Mr Peter Horobin MBE FAICD - President, SIA				
	Session 3: Keynote Addresses					
0900-0910	Welcome to South Australia - the Defence State	Premier of South Australia (invited)				
0910-0930	Opening Address	The Hon Stephen Smith MP - Minister for Defence (invited)				
0935-1000	My perspectives about submarines	VADM Ray Griggs AM CSC RAN - Chief of Navy				
1005-1030	Lessons Learned from the UK Successor Program	RADM Steve Lloyd, RN - Programme Manager, UK 'Successor' Programme				
1030-1050	Morning Coffee Break: Sponsorship Opportunity	Crowne Plaza breakout area				
1015-1035	The Challenges for Australia in undertaking the Future Submarine (FSM) Program	RADM Rowan Moffitt AO RAN - Head FSM Program				
1125-1150	The Future Submarine as a Nation-Building Activity	Mr Stephen Ludlam - Chief Executive Officer, ASC Pty Ltd				
1155-1205	Questions & Answers	Master of Ceremonies and Speakers from Session 3				
1205-1310	Lunch sponsored by Pacific Marine Batteries Pty Ltd	Crowne Plaza breakout area				
Session 4: I	Engineering Workforce Planning					
1310-1335	Workforce Development for the FSM Program	RADM Peter Briggs AO, CSC, RAN Rtd - Chairman, Defence Science Institute Advisory Board				
1340-1405	Developing and Sustaining Engineering Talent for large capital Naval Projects	Mr Jeff Owen - Director - Future Business - Marine & Technology Division, Babcock International Group				
1410-1435	Engineering Masters Programs to support Submarine Design and Maintenance	Dr Margaret Law - Innovation Manager, ASC Pty Ltd				
1440-1500	Afternoon Coffee Break: Sponsorship opportunity	Crowne Plaza breakout area				
1505-1530	Delivering a World-Class Submarine Capability for Australia	Ms Wendy Wates - Strategic Business Development, QinetiQ Pty Ltd				
1535-1600	Managing the Transition from Construction to Support	AVM Chris Deeble - Program Manager, Collins and Wedgetail, DMO				
1605-1630	Facing the Technical Challenges of the Future Submarine - the Coalition's Perspective	Senator the Hon David Johnston - Shadow Minister for Defence				
1630-1645	Questions & Answers	Master of Ceremonies and Speakers from Session 4				
1830-1900	Pre-Dinner Drinks sponsored by BAE Systems Pty Ltd	National Wine Centre - corner Botanic & Hackney Street, Adelaide				
1900-2230	Conference Dinner sponsored by Sonartech Atlas Pty Ltd Dinner Wines sponsored by Navantia	National Wine Centre Dinner Speaker: H.E. RADM Kevin Scarce AC CSC RANR - Governor of South Australia				

Thursday 10 November 2011 - Plenary Session							
0700-0830	13th Annual General Meeting of the S	<u> </u>	Hindmarsh 1, Crowne Plaza				
0800-0840	Day 3 Registration and Coffee		Crowne Plaza breakout area (top floor)				
Session 5: Technical Papers (in association with the Australian Society for Defence Engineering)							
	Stream A: Hull, Mechanical and Electrical Hindmarsh 1	Stream B: Combat Systems, Communications Hindmarsh 2	Stream C: Systems Engineering, Safety, Design and Logistics Support Hindmarsh 3	Stream D: Submarine Energy and Uninhabited Vehicles Hindmarsh 4			
0840-0900	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA	Welcome and Review of the Program for the Day Chair: TBA			
0900-0925	Electric Actuation of Submarine Equipments - Niall Skinner, MacTaggart, Scott and Company (presented by Brian Foster)	The Need for a Systems Engineering/Architectural Approach to the Design of Submarine Mission Systems - Michael Irrgang, Engineering Director, Raytheon Australia Pty Ltd	Designing for the Future - Modularity and Transformability in Submarine Design - Gunnar Öhlund , Senior vice President, Kockums AB	Air-Independent Propulsion Based on Fuel Cells and Methanol Reforming - Peter Hauschildt, Director R&D/ Conceptual Design/ German Navy, Howaldtswerke-Deutsche Werft GmbH			
0930-0955	Dynamics of the Swash Plate Mechanism - Josh Trainor , Chief Engineer, Rix Industries	Augmenting the Collins AN/BYG-1: Supporting In-Country Combat System Capability Evolution - Ted Huber , Managing Director, Acacia Research Pty Ltd and Graham Smith , Technical Operations Manager, Lockheed Martin Australia Electronic Systems	Achieving the Goal of a Submarine Modular Mission Payload System - Sean Williams and Tim Whitten, Babcock	Electrical Platform and Fuel Cell- based AIP Systems for Submarines - Albert Hammerschmidt , Director PEM Fuel Cells, Siemens			
0955-1015	Morning Coffee Break: Sponsored by	Moog Inc.	Crowne Plaza breakout area				
1015-1040	Innovative Solutions to reduce the Environmental Impact of Future Submarines - Eric Fusil , Naval Architect, DCNS	Developing Proven Submarine Combat System Technology to Future Customer Needs - Alfred Schulte, Chief Technical Officer, Sonartech Atlas Pty Ltd	Early Phase Availability Modelling - Chris Edmonds and Tammy Chau, Babcock	S-80 AIP System - Antonio Pérez de Lucas , Director Engineering and Innovation, Navantia			
1045-1110	Electrohydrostatic Actuators for Control of Undersea Vehicles - Steve Smith and PEJ Irving, Moog Industries	The Benefits of Wireless Networking Technology for use in existing and future submarines - Martin Childs , Platform Systems Manager, ASC Pty Ltd	Model-based Systems Engineering and its Application to Submarine Design - Paul Pearce , Lead Systems Engineer, Deep Blue Tech Pty Ltd	S-80 AIP System Land-Based Test Site - Amos Fuentes , Managing Director, Shipyard, Navantia			
1115-1140	A search method for localising a noise source on a submarine - Stewart Kanev , Specialist Signatures Engineer, ASC Pty Ltd	Networks of Underwater Systems - Craig Benson, Senior Lecturer, ADFA	Early Stage Tools for Submarine Design - "Boat-by-Numbers" - Paul Plant - A/Concept Team Leader, Deep Blue Tech Pty Ltd	Naval Architecture Challenges for the Integration of UUVs in Submarines - Eusebio-Ángel Martinez-Conesa, Navantia			
1145-1210	Submarine Manoeuvring and Appendage Design - Martin Renilson, Technical Director, Renilson Marine Consulting Pty Ltd	Virtual Ship Training and Information Systems (ViSTIS) for Submarines - Tom Reynolds , BD Manager, Maritime KBR Pty Ltd	The S-80 Submarine Building Program - Captain Nicolas Monereo , S-80 Head of Program, Spanish Armada	Design and Development of a Small, Low-Cost UUV for Shallow Water Operations - Nicholas Gover , Student, ADFA			
1210-1310	Lunch: Sponsored by Siemens Pty Lt	rd .	Crowne Plaza breakout area				

		Thursday 10 November 2011	- Plenary Session				
Session 5: Technical Papers (in association with the Australian Society for Defence Engineering)							
	Stream A: Hull, Mechanical and Electrical Hindmarsh 1	Stream B: Combat Systems, Communications Hindmarsh 2	Stream C: Systems Engineering, Safety, Design and Logistics Support Hindmarsh 3	Stream D: Submarine Energy and Uninhabited Vehicles Hindmarsh 4			
1315-1340	Human Factors and Habitability - Anders Folbert, Team Leader, Deep Blue Tech Pty Ltd	High Capacity Underwater Communications - Craig Benson , Senior Lecturer, ADFA	An Integrated Data Environment for the Future Submarine in Australia - Malay Pal, Director, Shipbuilding, Siemens Industry Software, India	Design and Development of a "6-Inch Submarine" - Joshua Fearnley , ADFA			
1345-1410	Development of Composite Pressure Vessels for Submarine External Stowage - Dan Miller , Engineering Services Manager (SA), ASC Pty Ltd	Periscopes and Optronics - Future Submarine Visual Systems - Adam Waldie, Business Development Manager (Submarines), Thales Underwater Systems and Alan Stevenson, Optronics Sales Director, Thales Optronics Limited (UK)	Establishment of a Cost-Effective Submarine Support Capability in Canada - Michel Bouchard - President, Canadian Submarine Management Group	6-DOF Particle Filter-based Navigation System for AUV - Andrew Lammas , PhD Student, Flinders University			
1415-1440	Development of a Capability for Measuring Dewpoints at High Pressure for the Collins Class Submarine - James Gregor , ASC Pty Ltd	Submarine Sonar - Outboard Acoustic Array Technologies - Tim Cain , Thales Australia Pty Ltd	Infrastructure Considerations of Possible Investment in an SSN Option - Jock Thornton, University of South Australia	The Utility of Virtualisation Technologies to Combat Submarine Combat System Obsolescence - David Culpin, Engineering Manager, Raytheon Australia			
1440-1510	Afternoon Coffee Break: Sponsored by Hynergreen Technologies, S.A.		Crowne Plaza breakout area. Rooms to be reconfigured.				
1515-1545	Open Forum		MC and all Authors of Day 3 papers				
1550-1610	Closing Remarks		President SIA				