



COLLINS
LIFE OF TYPE EXTENSION
Issues & Opportunities



7-8 NOVEMBER 2018
CANBERRA REX HOTEL
www.submarineinstitute.com

20 March 2018

SIA Ref: 18/CFP/0315-1

SIA 9th Biennial Conference, 6-8th November 2018
Canberra Rex Hotel, Northbourne Avenue, Canberra, ACT

CALL FOR PRESENTATIONS

The Government has decided to mitigate any potential gap in submarine availability and capability prior to the acceptance into service, beginning in about 2031, of the Future Submarine. This will be achieved by the instigation of a Life of Type Extension (LOTE) to the Collins class submarines. The number of Collins class submarine to be included in this program, together with the strategic considerations, have yet to be announced. Inevitably, there will be challenges with the planning, structure and content of the program. There will also be opportunities to examine capabilities and technologies that may be candidates for inclusion in the Future Submarine program

The theme for the SIA 9th Biennial Conference is:

Collins Life of Type Extension – Issues and Opportunities

The conference focuses on the strategic and tactical considerations of sustaining appropriate submarine availability and capability as the Collins class approach the their planned 'Life of Type' and the ramping-up of the Future Submarine construction program and acceptance into service.

Day 1 (6 November) comprises the Opening Reception including announcement of the winner of the Submarine Engineering Excellence award.

Day 2 (7 November) will include invited speakers from major stakeholder organisations.

Day 3 (8 November) will include papers from this open call.

The SIA is seeking presentations of 25 minutes plus 5 minutes for questions for oral presentation during Day 3 of the conference. The slides will be edited and published online as pdf files with the consent of the author(s). If a written paper is offered, it will also be made available to delegates. Proposals that are blatant marketing presentations will be rejected.

Suggested topics for presentations:

Collins class capability enhancement and licensing for LOTE

- Experience of LOTE process from other submarine operators
- Critical issues for life extension
- Opportunities to test and evaluate new technologies and new operating and sustainment processes in Collins class before installation in the Future Submarine
- Integrating Multi-National Technology
- Integrating advances in acoustic communications and signal processing
- Expanded capability for network-centric warfare with other manned and unmanned vehicles

Information management relevant to interaction between Collins LOTE and Future Submarine

- Formats for operational and sustainment publications or interactive process manuals
- Quality, cost, schedule, effort and other record keeping practices that will be adopted

Balancing workforce requirements for the Australian submarine force between Collins LOTE and Future Submarine production

- Community education on role and functions of long-range submarines –Intelligence Gathering, Surveillance and Reconnaissance [ISR]; strategic maritime strike; deterrence.
- Recruitment and retention of submarine personnel
- New educational programs for the submarine workforce – uniformed and civilian
- Application of social media and massively open online courses for submarine workforce professional development and support
- National and regional engineering and technical skill training development, demand and supply relevant to submarine design, construction, operation and sustainment;
- Education programs for submarine systems engineering and systems integration
- Materials science and technology education and workforce development.

IP Protection, Transfer of Sensitive Technology – Aspects for Collins LOTE

- Stealth Technology
- Combat systems integration, test, evaluation and software development.
- Sensors and Weapon Systems
- Trusted Autonomous Systems – application, operation and support from submarines

Research and Development,

- Test and Evaluation Policy and Management – accelerating the process to accommodate rapid changes in technology
- Scientific research and development strategy and management;
- Rapid application of emergentechnology for use in the submarine force

Engineering Design -

- Considerations for improving design'margins' for Collins in the LOTE program
- Australian Defence Organisation policy for research, development, test and evaluation and engineering design reviews

Abstracts:

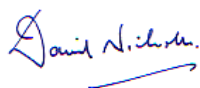
Abstracts of proposed presentations in MS Word format (limit 250 words) should be submitted using the form available at <https://form.jotform.com/frankowen/SIA2018-cfp>

Submission Timetable:

- Abstracts should be submitted by Friday 8th June 2018
- Acceptance of abstracts will be notified by Friday 6th July.
- Submission of biography and photograph by Friday 14th September
- Acceptance of paper (if submitted) and draft conference program notified by Monday 24th September.
- Final presentations submitted using above form by Friday 26 October 2018

The Institute is seeking conference participation from Australian and overseas academic, government and industry representatives, together with other involved organisations.

Speakers will be provided a special code permitting complimentary registration for the day of their presentation.



David Nicholls
Executive Director
Submarine Institute of Australia
+61 413 133 391
email: conference@submarineinstitute.com