National Shipbuilding Procurement Strategy—Charting the Course

Up to this point the National Shipbuilding Procurement Strategy has focused on contractor selection and design. There has been criticism, but more recently the Office of the Auditor General concluded that: "The NSPS should help the government to procure federal ships in a timely, affordable manner, consistent with the build-in-Canada shipbuilding policy." However the broader environment may not be as propitious, and the Auditor General also noted that "a gap appears to be developing between the CFDS level of ambition, the evolving naval capabilities, and the budgets." Likely not much has changed here, and now may well be a good time to examine the NSPS' current progress and the challenges ahead.





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National Shipbuilding Procurement Strategy—Charting the Course

A Maritime Security Workshop



6 June 2014 Dalhousie University Halifax, Nova Scotia Canada



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We are the institutional home of the *Canadian Naval Review* and of *The Roméo Dallaire Child Soldiers Initiative*.

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Editorial Preview: ... Two powerful events have placed the navy in a difficult position. Neither is maritime specific and neither originates in Canada but they are combining to challenge the future of the Canadian Navy. The first is the Afghanistan War and the second is the 2008 economic crisis. The cost of the war and the fallout from the economic crisis now threaten the ship replacement plan... The war in Afghanistan proved that the Canadian Forces need the ability to move quickly with little notice to support allies and face threats to

Editorial Preview: War and Economics

Canadian security. The economic crisis demonstrated how dependent Canada is on the well being of its trading partners. The fact that we have had a crisis in both national security and economic security underlines the need for a modern, robust and capable Canadian Navy that can play a vital role if this happens in the future. But the impact of these two events means that the Canadian Navy faces severe challenges to getting all or even part of what it needs...

Dr. Rob Huebert, University of Calgary

In his current role Mr. Arthurs is responsible for the Artic Offshore Patrol Ship Command and Surveillance Systems Integrator (AOPS C&SSI) program (in design phase with ISI) and the recently signed Frigate Systems Upgrade (FSU) modernization of two ANZAC class frigates for the RNZN as well as future naval programs.

In his career since he left the RCN Mr. Arthurs has worked continuously for the RCN as an industrial partner applied to modernizing the naval fleet. His experience with shipyards has been significant in the ship build and mid life refit arenas.

THALES – Jerry McLean is an executive manager and has considerable experience in both government and industry procurements and programs. Jerry was involved in many national and international programs and successfully managed organizations ranging in size from ten to ninety five . He has a strong technical background in Naval Command and Control, radar systems, electronic warfare, weapons, and training systems.

A graduate of the Canadian Forces Command College in 1997 and College Militaire Royale in 1985, Jerry served in the Royal Canadian Navy for 28 years as a Combat Systems Engineer (CSE). Jerry assumed the responsibilities of Director, Marketing, Sales and Strategy for Thales Canada, Defence and Security in 2009.

MDA – Rich Billard - Business Development Manager for MDA Systems Ltd for the past four years. MDA is a Global Communications and Defence Company with offices across Canada (Halifax, Montreal, Ottawa, Toronto, and Headquartered in Vancouver). Each office has a focus area with the Halifax office focused on Defence and primarily support for RCN programs such as the KINGSTON Class ISS, Victoria Class Trainers, and the Maritime Command Operational Information System. We also have a team supporting the Satellite work for the new RCM project and another team leading the Northern Watch TDP with DRDC (A).

Prior to joining MDA I served for 20 years in the RCN retiring as a Commander. While serving I obtained a Masters in Defence Studies from the CF Staff College in Toronto, an MBA from the Sobey School of Business at Saint Mary's in Halifax and a Bachelor of Chemical and Materiel Engineering from the Royal Military College in Kingston. Some notable postings included DMSS 8 (Command Control and Communications) in Ottawa, Senior Staff Officer Engineering and Maintenance at MARLANT HQ in Halifax, and as the Combat Systems Engineering Officer in HMCS CHARLOTTETOWN for Operation APOLLO.

Purpose

The purpose of this workshop will be to bring together invited representatives from industry, academia, the federal government, including the RCN, DND, PWGSC, Canadian Coast Guard, and officers of Parliament and the government of Nova Scotia, to identify, discuss and share their perspectives on the potential challenges and issues as the NSPS proceeds through the various phases in the procurement process. Chatham House rules will be in effect. Media has not be invited but some follow-on academic research and articles emanating from the discussions are anticipated, with non-attribution in effect per the Chatham House rules.

National Shipbuilding Procurement Strategy Charting the Course

Friday, 6 June 2014

Location: 6300 Coburg Rd., University Hall, MacDonald Building

- 0745 0815 Registration & Continental Breakfast
- 0815 0830 Introduction & Welcome
- 0830 0915 Special Presentation:

Joint Support Ship (JSS) General Arrangement Drawings (**Mr. Brian Lavigne** - JSS Program Office - Department of National Defence, Materiel Group)

Arctic/Offshore Patrol Ship (AOPS) General Arrangement Drawings (**LCdr Jamie Sangster** – AOPS Program Office -Department of National Defence, Materiel Group)

The scientific/research implications of the AOPS (**Jim Hanlon** – Chief Executive Officer – Institute for Ocean Research Enterprise (IORE))

0920 - 1030 Morning Panel Discussion: NSPS - Current Progress and Potential Future Challenges

Chair: Dr. Eric Lerhe, Dalhousie/CFPS

Budget 2014, the CFDS Reset, and the Impact on the NSPS (**David Perry** – Senior Security and Defence Analyst, CDA Institute)

Key industrial capabilities and the NSPS: Sailing toward global leadership (**Yan Cimon** – Associate Professor, Department of Management, Laval University)

The method to our madness: Independent Cost Estimating at the PBO (**Erin Barkel** – Office of the Parliamentary Budget Officer)

The NSPS Program View (**Matthew Crawley**, PWGSC - Senior Director, National Shipbuilding Procurement Strategy Secretariat) **Ken Hansen** was the Military Co-Chair of the Maritime Studies Programme at Canadian Forces College in Toronto before holding the naval defence fellowship at Dalhousie. Retired from the navy in 2009, he joined CFPS as a resident research fellow and lecturer before appointment as Adjunct Professor in Graduate Studies (Department of Political Science) in 2013. Ken is a member of the Science Advisory Committee for Atlantic Oceans Research Enterprise, a member of the Security Affairs Committee for the Royal United Services Institute, a member of the editorial board for *Canadian Naval Review* and the moderator for *Broadsides*, the on-line discussion forum of the journal. His research includes joint and interagency maritime security theory and doctrine, planning processes and logistical requirements. Ken has received numerous naval service and literary awards, plus a Commendation from the City of Edmonton Police Department.

Captain (N) (Retired) Ian Parker, a graduate of the Canadian Forces College and the United States Naval War College, served in the Canadian Navy for 37 years and commanded HMC Ships FRASER and PROVID-ER.

His executive appointments spanned strategic development and force planning, including involvement in several Defense reviews, requirements development and implementation and Human Resource Management. Ashore CF he served as the Director Military Careers, the Director Maritime Strategy and the Director General Maritime Development and Operations and as Chief of Staff to the Chief of the Maritime Staff/ Commander Maritime Command.

Since he retired, Mr. Parker has been a consultant in Canada's Defence and Security Industry providing strategic advice to clients in Canada's defence industrial sector from shipyards to major integrators to small and medium enterprises.

Lockheed Martin – Kevin Arthurs leads Lockheed Martin Canada's Naval Systems department. His team oversees the requirements analysis, system architecture development and system design of both current and future Naval Combat Systems Integration programs. His expertise is gained though over 35 years of design, integration, test, trials and inservice support of the naval combat systems.

Prior to joining Lockheed Martin Canada Mr. Arthurs held the position of Combat Systems Manager with Saint John Shipbuilding Limited during the Canadian Patrol Frigate Program. technology, biotech among others) that face a globalizing economy.

He held the Fulbright Visiting Chair in Innovation at the University of Washington (Seattle) in the Fall of 2012 where he studied the integration of North American value chains. His work has had a significant impact on academia and practice earning him a 2010 Star Researcher Award at the Rendez-vous du Savoir. Prior to his academic career, he worked in the Real-time Embedded Systems division of a major multinational firm in the Defence industry. An author of numerous papers and conferences, he was elected to *Alpha Iota Delta*.

Erin Barkel is a Financial Analyst working in the Canadian Office of the Parliamentary Budget Officer. Before joining the PBO, Erin was an Analyst at the Treasury Board Secretariat, providing policy advice on Investment Plans and Projects. She holds a BASC (Industrial Engineering) from the University of Toronto and an MBA from the Ted Rogers School of Management at Ryerson University. In her spare time she is slowly pursuing a PhD in Management at the Sprott School of Business at Carleton University.

N. Matthew Crawley, PEng, MAsc, PMP, Senior Director, National Shipbuilding Procurement Strategy Secretariat, Public Works and Government Services Canada

Mr. Crawley has held various executive appointments within Public Works and Government Services Canada, including his current role as the Senior Director for the National Shipbuilding Procurement Strategy (NSPS) Secretariat. He is responsible the management of the long term strategic sourcing relationships with the selected east and west coast shipyards. Prior to this, Mr. Crawley was the Director of Procurement for the Joint Support Ship project, where he was responsible for leading the procurement activities for this complex acquisition program. Before joining the Acquisitions Program, Mr. Crawley was the Director Strategic Systems for the Receiver General for Canada, where he was responsible for the management of the Receiver General Treasury Systems, liaising with over 100 government departments, national and international financial institutions, to ensure the continued systems operations and interoperability for payments and receipts from the Governments consolidate revenue fund. Prior to this, Mr. Crawley held a number of positions with the Department of National Defence, on a number of Major Crown Projects, including the Close Combat Vehicle Project and the Maritime Helicopter Project while working at Sikorsky Aircraft. Prior to joining the Public Service, Mr Crawley worked for Bombardier Aerospace in Toronto, where he held various manufacturing and engineering roles.

1030 - 1050	Coffee break
1050 - 1150	Moderated Q&A Session for Morning Panel
1150 - 1210	Morning Session - Wrap Up & Take-Away
1210 - 1310	Lunch
1310 - 1440	Afternoon Panel Discussion: The Canadian Surface Com- batant (CSC)
	Chair: Ken Hansen, Dalhousie/CFPS
	"What the NSPS has delivered; what remains; government ca- pacity; and lessons learned". (Ian Parker - CFN Consultants)
	"The CSC Statement of Requirements - Pushing the Enve- lope?" (Eric Lerhe – CFPS)
	Industry perspectives for delivering the capability:
	Lockheed Martin Canada: "The evolution of Canadian Command & Control Systems" (Kevin Arthurs – Director of Engineering)
	Thales: "CSC Evaluation Challenges" (Jerry McLean – V-P Marketing & Sales)
	MDA Corporation: "Topic TBD" (Rich Billard – Manager Business Development, Defence Systems)
1440 - 1500	Coffee break
1500 - 1600	Moderated Q&A Session for Afternoon Panel
1600 - 1620	Afternoon Session - Wrap Up & Take-Away
1620 - 1630	Workshop Closing Remarks
1630 - 1800	<i>Workshop Closing Reception & Networking Event</i> Location: Dalhousie University Club

Participant Biographies

Brian Lavigne is the Replenishment at Sea and Cargo Systems manager. He has been with PMO JSS for the past eight years and has sailed with the German Navy on FGS Bonn. Prior to this he was the Life Cycle Systems Manager for Weather deck systems in DGEMPM.

Lieutenant Commander Jamie Sangster P.Eng MSc is currently the AOPS Detachment Commander embedded within the Irving Engineering Team. Jamie is a Marine Systems Engineer and Naval Architect and has served as the MSEO in Halifax Class Frigates. In addition to fleet operational service, Jamie has served in several Fleet Engineering positions here in Halifax. Most recently serving as the Naval Architecture Officer for the East Coast Fleet and Technical Director for the Victoria Class Submarine Refit program. Has holds a Bachelor Degree in Mechanical Engineering from Royal Military College and a Masters in Science (Naval Architecture) from the University College London, UK.

Jim Hanlon - Jim is a 30-year veteran of the ocean tech industry, having worked in design, marketing and management for companies in Canada and New England. His career has spanned the aerospace and defence sectors as well as the marine environmental monitoring field. Over the years, Jim has worked in senior management positions with several large publicly traded multinationals but has also sampled the waters of the entrepreneurial well as an owner in two separate ocean tech companies that have successfully grown and been purchased by multinationals.

Until February of 2012, Jim was the President of Ultra Electronics Maritime Systems in Halifax. He and his partners sold their company to Ultra in May of 2008. In May of 2012, Jim assumed the role of CEO of the Halifax Marine Research Institute, now re-named the Institute for Ocean Research Enterprise (IORE), a not-for-profit company established to foster collaborative ocean research among universities, government labs and private companies.

Jim's personal passion is innovation and its impact on the competitiveness of the ocean tech industry.

Jim holds a Bachelor of Electrical Engineering degree from The Nova Scotia Technical College (now Dalhousie University). He also has an MBA in marketing from Saint Mary's University in Halifax and he is a registered professional engineer in Nova Scotia. **Commodore Eric Lerhe** joined the Canadian Forces in 1967 and was commissioned in 1972. From 1973 until 1983 he served on the HMCS RESTIGOUCHE, YUKON, FRASER and ANNAPOLIS. He was promoted to Commander on 1 January 1986, and assumed command of HMCS NIPIGON in September 1987and then HMCS SAGUENAY on 6 January 1989.

During the 1990's he served as Director Maritime Force Development and Director NATO Policy in NDHQ. He earned his MA at Dalhousie in 1996 and was promoted to Commodore and appointed Commander Canadian Fleet Pacific in January 2001. Cmdre Lerhe retired from the CF in September 2003 and commenced his doctoral studies at Dalhousie.

His dissertation was recently published by the Dalhousie Center for Foreign Policy Studies as *At What Cost Sovereignty? Canada-US Military Interoperability in the War on Terror.* His other interests are defence policy, NATO, the 3 D approach, and general naval issues.

David Perry is Senior Security and Defence Analyst with the CDA Institute, and a doctoral candidate in political science at Carleton University where he studies defence privatization. He holds the DND Defence Engagement PhD Scholarship and is a past recipient of the Dr. Ronald Baker Security and Defence Forum PhD Scholarship and a SSHRC Canada Graduate Scholarship. In addition to numerous publications with the CDA Institute, his research has appeared in Defence Studies, International Journal, Comparative Strategy, the Journal of Military and Strategic Studies, and the Canadian Naval Review. He is a frequent media commentator on national defence and security issues and has testified before the House of Commons Standing Committee on National Defence.

Originally from Rothesay, NB, he received a BA in Political Science and History from Mount Allison University and an MA in Political Science from Dalhousie University.

Yan Cimon, C.D., Ph.D. (HEC Montreal) is Associate Professor of Strategy at the Faculty of Business Administration at Universite Laval (Quebec City, Canada). An alumni of the de *Defense Planning and Resources Management* program of National Defense University (Washington D.C.), he is Deputy Director of CIRRELT (Quebec), the Interuniversity Research Center on Enterprise Networks, Logistics and Transportation. He is also an associate member of HEI, the Quebec Institute for Advanced International Studies. Keenly interested in North America's firms and business environment, his research focuses on strategic and networkrelated issues in several industries (aerospace and defence, automotive,