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WILL THE ROYAL CANADIAN NAVY SURVIVE THE NATIONAL SHIPBUILDING PROCUREMENT STRATEGY

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Exercise Solo Flight

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INTRODUCTION

When, on 19 September 2014, Vice-Admiral Mark Norman, Commander of the Royal Canadian Navy (RCN) announced the retirement of four ships: Her Majesty's Canadian Ship (HMCS) PROTECTEUR, PRESERVER, IROQUOIS and ALGONQUIN, he also identified the ramifications of these actions. "The retirements of these ships will generate some loss in both capacity and capability for the RCN. These losses, however, will be mitigated in the short-to-medium term as the RCN builds toward the future fleet."¹

The building of the future fleet was his reference to the National Shipbuilding Procurement Strategy (NSPS) that was announced by the federal government 3 June 2010 and touted one of its goals to "deliver the ships for the men and women of the RCN and Canadian Coast Guard needed to protect the security and interest of Canadians into the future."² Yet, was the NSPS designed to deliver the required ships to the sailors in the RCN? Or was it designed to create a long-term economic industry of shipbuilding in Canada?

In the majority of government announcements and speeches, the same priorities are consistently given as the goals of the NSPS: long-term jobs and economic growth for the country, stability for the industry, and vital equipment for the men and women in the RCN and Canadian Coast Guard. Since the 2010 announcement, the selection process of the two shipyards in 2011 until today, there has been much criticism and debate on the merits of this strategy. The initial economic benefits of a \$35 billion contract cannot be

¹Royal Canadian Navy, "RCN begins transition to the future fleet," last modified 5 November 2014, <http://www.navy-marine.forces.gc.ca/en/news-operations/news-view.page?doc=rcn-begins-transition-to-the-future-fleet/i1pge1j>.

²Public Works and Government Services Canada, "Backgrounder on the NSPS – Year 2: A Status Update," last modified 19 November 2014, <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/snacn-nsps-eng.html>.

denied, but five years into the strategy, these costs are proving to be unrealistic and will the contracts actually provide the RCN with the capability that is required?

The selection process of the two shipyards was designed to be fair and transparent and they are intended to represent the best value for Canadians; there has been criticism, however, in the lack of oversight on the selection of subcontractors. In addition, the Parliamentary Budget Officer's report, released in October 2014, identified that the budget for the Arctic/Offshore Patrol Ship (A/OPS) would be insufficient to procure the planned six to eight ships. Is *Made in Canada* the best strategy? Considering the building of the hull is occurring in Canada; however, the higher technical and more complex systems could possibly be constructed outside of Canada, will this sustain the industrial economy or is it only a short term infusion of funds that could disappear when the hulls are constructed?

The intent of this paper is to examine the effectiveness of the recent Defence Procurement Strategy and the economic benefits of the National Shipbuilding Procurement Strategy, determining if we are in fact receiving the "best value" for our investment. In addition, the Government of Canada's priorities will be examined as it relates to the potential economic benefits at the national and regional levels, and if these priorities can fulfill the RCN's capability gaps.

THE POLITICS OF SHIPBUILDING

Canada has built ships since the 1600s with capacity reaching its peak during the Second World War. From an almost non-existent Canadian inter-war industry of three shipyards that employed less than 4,000, to a rapid expansion to 90 yards on the east and west coasts, the Great Lakes and even inland. More than 126,000 were

employed. In total, the shipyards built 4,047 naval vessels, and in the middle of wartime, the ten-thousand-tonne SS Fort Romaine was constructed in 58 days.³

Post-war, there was still a shipbuilding industry in Canada and government contracts were allocated to major shipyards in order to keep them operational. The Canadian Maritime Commission kept track of the contracts to ensure that shipyards without private business could be kept in operation.⁴

As it is today, post-war naval shipbuilding was determined by “political considerations that demanded the ships and as much other equipment as possible should be built in Canada.”⁵ There were many challenges, for the Canadian shipbuilder was heavily reliant upon the British models and had not yet designed their own warships; the *St-Laurent* class of Anti-Submarine Destroyer Escorts was to be the first. Given the complexity of the project, a number of offices were established from the Naval Constructors who were required to bring together the technical requirements to the Naval Shipbuilding Central Procurement Agency which was to identify and develop Canadian sources of material and components to ensure the Canadian content of the ships. The Principal Naval Overseers (PNO) were always present and had the most demanding of roles as the conduit to the various technical branches and as the naval contact to the shipyard, thus they were in receipt of constant complaints. The PNO reported to the Department of Defence Production and accounted for all aspects of the project. The layers

³Canadian War Museum, “Canada and the War – The war Economy and Controls: Shipping and Shipbuilding,” last accessed 28 April 2015, http://www.warmuseum.ca/cwm/exhibitions/newspapers/canadawar/shipping_e.shtml.

⁴Michael A. Hennessy, “Postwar Ocean Shipping and Shipbuilding in Canada: An Agenda for Research,” *The Northern Mariner*, No. 3 (July 1991): 25-33, http://www.cnrs-crn.org/northern_mariner/vol01/tnm_1_3_25-33.pdf.

⁵S. Mathwin Davis, “Naval Procurement, 1950 to 1965,” in *Canada's Defence Industrial Base*, ed. David G. Haglund, 97-117 (Kingston: Ronald P. Frye & Company, 1988).

of bureaucracy were there for oversight and to ensure value for money was achieved; however with many senior officials it was difficult to unite and there was a lack of tolerance and respect at each level. This intolerance transcended to the lower levels and increased the rivalry in the already complicated bureaucratic heavy process.⁶

Is it cost effective to build warships in Canada or should we be putting our money into regional high tech components and build the actual hulls outside Canada? This has been a question asked in Australia and will be examined further in this paper. We can look at the example of the Royal Navy and the awarding of the 2012 contract for the Military Afloat Reach and Sustainability (MARS) vessels to Daewoo in Korea. Jack Granatstein, Canadian military historian, in a 2013 commentary for the Canadian Defence and Foreign Affairs Institute offered that “Canada’s future advantage, much like Britain’s, lies in designing ships and their systems, engineering, automation, and fitting out vessels. Every one of these industries would be much easier to establish than building hulls in brand new shipyards from scratch.”⁷

Granatstein also questioned if perhaps the best value for the taxpayer would be the government investing in thousands of skilled jobs versus the infrastructure and labour costs of building a shipyard that in Canada, historically, no government was willing to fund and to keep open after the contracts were completed.⁸ Providing examples of the

⁶*Ibid.*, 101.

⁷J.L. Granatstein, “Building Ships in Canada?,” *Canadian Defence & Foreign Affairs Institute*, last modified November 2013, http://www.cdfai.org/november_2013_column.

⁸*Ibid.*

Dutch navy buying Romanian-built ships and the Danish buying Polish-built ships, he has argued that the development, fabrication and installation of armament and communications systems in home waters is much more beneficial in creating good quality sustainable jobs. Of particular note is his statement that “no government can bind its successors to follow any policy.”⁹ If there is a change in government and it is determined that the cost of the acquisition project is just too high, the incoming government may very well terminate the project. Though sounding pessimistic, history has demonstrated how easy it is to do; an excellent example would be the Jean Chrétien 1993 cancellation of the EH-101 “Cadillac” contract and the incurrence of \$478 million in penalties.

One only needs to look at the history of our Naval shipbuilding to see the disconnect between government priorities and DND requirements. The acquisition of the *Iroquois*-Class Destroyers in the 1970s originated in the early 1960s with a plan to build eight general-purpose frigates. The Pearson government cancelled the project when cost estimates rose from \$275 million to \$450 and \$500 million. The project was eventually started again under the Trudeau government; however, it was four destroyers, instead of eight frigates, which were delivered at a cost of \$252 million, almost twice the estimate of \$142 million.¹⁰

The Canadian Patrol Frigate Project in the 1980s was, at the time, the “largest

⁹J.L. Granatstein, “National interests collide in ship strategy,” *Times Colonist*, last modified 1 November 2013, <http://www.timescolonist.com/opinion/columnists/j-l-granatstein-national-interests-collide-in-ship-strategy-1.680471>.

¹⁰Michael Byers and Stewart Webb, “Blank Cheque: National Shipbuilding Procurement Strategy Puts Canadians at Risk,” *Canadian Centre for Policy Alternatives*, (December 2013): 7.

single defence procurement ever undertaken by Canada.”¹¹ The result for St. John Shipbuilding Ltd was a major influx of funds for their construction of nine of the frigates and their purchase of a number of other shipyards. However, once the ships were completed, the economy had shifted as did Government priorities. Despite an estimated \$198 million directed to national shipbuilding between 1986 and 1993 the government offered J.D. Irving Ltd \$55 million in 2003 for the shipyard to close.¹²

The last example wherein capability does not meet government priorities is with the *Kingston-Class*, Maritime Coastal Defence Vessels (MCDVs). The original plan for 18 MCDVs as well as six patrol corvettes, was soon reduced for cost effectiveness. The corvettes were removed from the wish list and the capability of the MCDVs was scaled back. The result was only four years of shipbuilding work for the Halifax Shipyards.

In his 1988 article, *The Politics of Procurement: The Low Level Air Defence Decision of 1986*, William B. Fox discusses the bureaucracy and decision making process in Defence procurement. These points are as relevant today as they were thirty years ago; of note is the “increasing concern with the politicization of the process. The personal preferences of individual Ministers, particularly related to the regions they represent, can affect decisions that, according to the established system, should have been made on their own merit.”¹³

¹¹Public Works Government Services Canada, *Interdepartmental Review of the Canadian Patrol Frigate Project – Report on the Contract Management Framework*, (Ottawa: DND, 1999), last accessed 27 April 2015, <http://www.crs-csex.forces.gc.ca/reports-rapports/pdf/1999/framework-cadre-eng.pdf>.

¹²MarineLog, “Saint John Shipbuilding Closes,” last accessed 27 April 2015, <http://www.marinelog.com/DOCS/NEWSMMIII/MMIIIJun28.html>.

Fox then takes the DND point of view on how the politicization of the process has two effects: they are that the emphasis on industrial benefits, offsets and regional economies has lengthened the procurement process and, secondly, the cost for the acquisitions of defence equipment produced in Canada has increased substantially versus equipment that was procured outside Canada.¹⁴

Will the NSPS be any different than each Naval Shipbuilding contract we have already witnessed? We will examine how the selection process and strategy was designed to be more streamlined and effective; however, will it succeed?

Canadian First Defence Strategy and the Defence Procurement Strategy

When the Harper Government released the Canada First Defence Strategy (CFDS) in 2008 there were a number of key points to be taken from the first page and Stephen Harper's comments. He states:

“...the Strategy not only delivers increased security for Canadians, but also significant economic benefits for citizens across the country. By unveiling a detailed plan for the future replacement of key equipment fleets, we are providing Canadian industry the opportunity to more effectively meet defence procurement requirements, and to position themselves for global excellence”¹⁵

The CFDS articulates what the clearly defined missions and capabilities are for the Canadian Armed Forces, which are:

¹³William B. Fox, “The Politics of Procurement: The Low Level Air Defence Decision of 1986,” in *Canada's Defence Industrial Base*, ed. David G. Haglund, 159-185, (Kingston: Ronald P. Frye & Company, 1988).

¹⁴*Ibid.*, 169.

¹⁵Department of National Defence, “*Canada First Defence Strategy*,” last accessed 29 April 2015, <http://www.forces.gc.ca/en/about/canada-first-defence-strategy.page>.

1. Conduct daily domestic and continental operations, including in the Arctic and through NORAD;
2. Support a major international event in Canada, such as the 2010 Olympics;
3. Respond to a major terrorist attack;
4. Support civilian authorities during a crisis in Canada such as a natural disaster;
5. Lead and/or conduct a major international operation for an extended period; and
6. Deploy forces in response to crises elsewhere in the world for shorter periods.

CFDS then outlines a very ambitious plan that is designed to provide the military with stable, predictable funding and the right equipment and training. From an increase in personnel to the replacement of the destroyers and frigates and maritime patrol and fighter aircraft, it was all there in writing what the commitment was to improve and move the military into the future. All of this was to be achieved with a \$490 billion price tag attached over twenty years.¹⁶

The key points in Prime Minister Harper's statement was the increased security for Canadians, and the opportunities that would be afforded to Canadian Industry. The first point is a given, considering it is a Strategy for Canada's Defence, the second point though is well presented in the end of the document in Part VI: Positioning Canadian Industry For Success. In this part, the government's strategic plan is outlined to boost the economic prosperity and global competitiveness and quality of life of Canadians.¹⁷

It also details what the government will do to effectively interact with industry

¹⁶Department of National Defence, *Canada First Defence Strategy*, last accessed 29 April 2015, <http://www.forces.gc.ca/en/about/canada-first-defence-strategy.page>.

¹⁷*Ibid.*

and how it will “improve the way it procures new equipment, fostering greater transparency and engaging industry earlier in the process. These ongoing procurement reforms will further streamline the contracting process and ensure that it continues to remain open and fair.”¹⁸ The CFDS has outlined what the government hopes to achieve as it relates to defence, industry and procurement. Have these goals been realized since 2008 or are they too far reaching in today’s global economy?

The Government of Canada on 5 February 2014 released its Defence Procurement Strategy (DPS) with three key objectives:

1. Deliver the right equipment to the Canadian Armed Forces in a timely manner;
2. Leverage acquisition of defence equipment to create jobs and stimulate economic growth in Canada; and
3. Streamline the defence procurement process.

The Government also announced that it would publish a Defence Acquisition Guide (DAG) annually, which will identify potential CAF requirements and procurement projects. A quick review on 28 April 2015 indicated that there are approximately 198 of these requirement and projects between Naval, Land, Aerospace, Joint and Service Systems, with 13 of them being complex projects worth a billion or more and others with completion dates estimated by 2035.¹⁹

¹⁸*Ibid.*

¹⁹Department of National Defence, *Defence Acquisition Guide 2014*, last accessed 28 April 2015, <http://www.forces.gc.ca/en/business-defence-acquisition-guide/index.page>.

Will the DPS be an effective strategy for procurement and will it satisfy both the government and the defence capability needs? The Conference of Defence Associations Institute and the MacDonald-Laurier Institute conducted over 50 confidential interviews and workshops with currently serving acquisition officials and political staff and their findings were released in the January 2015 report “*Putting the Armed back into the Canadian Armed Forces, Improving Defence Procurement in Canada.*”

They first stated that Canada is not unique in its defence procurement issues and that many of our allies have the same difficulties. The report also made an important acknowledgement that defence procurement is not as much of a disaster that we have been led to believe. Smaller value items and spare parts are procured without issue; it is in the domain of the Major Crown Projects where the focus is placed. These are high value items; ships and aircraft, and represent a disproportionate share of the contracting process, as well as garnering the most attention.²⁰

What are the procurement issues for major acquisitions and how can they be ameliorated? While, currently, there are delays in the procurement of equipment, this as illustrated earlier, is not a new phenomenon; in fact in the last decade, there has been a significant improvement in reducing the time frame of getting into a contract from 107 months down to 48 months.²¹ The difference recently has been the increase in workload since the release of CFDS in 2008, and then the reporting requirements for these projects have increased by 50 percent over the last five years.

²⁰Dave Perry, “Putting the “Armed” back into the Canadian Armed Forces Improving Defence Procurement in Canada, *Conference of Defence Associations Institute*, (January 2015): 3.

²¹J.C. Stone, “A Separate Defence Procurement Agency: Will it Actually Make a Difference?” *Canadian International Council*, (February 2012): 10.

The only thing exacerbating the issue is the reduction in personnel at DND ADM Materiel (ADM (Mat)), which was identified in Auditor General Reports both in 1998 and 2004, and they noted inexperience, inadequate training and insufficient staff as problems in capital acquisitions during that time.²² Then as a result of the Deficit Reduction Action Plan (DRAP) ADM (Mat) was reduced by another 400 positions, as the Report states: “The disparity between workload and capacity since 2007/2008 lies at the heart of much of the procurement delay experienced present day. It is simply unreasonable to expect that fewer people can cope with a significant expansion in workload.”²³

We have the CFDS relating a financial commitment to the desired capabilities for DND yet, as time is passing, it is obvious that the funding will not be adequate for the acquisitions and that each environment is going to be required to manage these expectations within their own budgets: “A lack of articulated strategic priorities has therefore made resolving the gap between funding and capabilities more difficult.”²⁴ The CDA Institute was not the only organization to recognize the capability gap between the CFDS and the requirements of the environments.

In the *2013 Fall Report of the Auditor General of Canada*, the Chapter 3 topic is a Performance Audit Report on the NSPS. As the CFDS is the policy document, they note that there is an awareness that complex projects require years to design and build and that it is important that the government’s “level of ambition” and DND’s capabilities are

²²Dave Perry, “Putting the “Armed” back into the Canadian Armed Forces Improving Defence Procurement in Canada, *Conference of Defence Associations Institute*, (January 2015): 9.

²³*Ibid.*

²⁴*Ibid.*, 10.

regularly measured and monitored in order for each to meet the other's expectations. The Auditor General did note regular updates were occurring between National Defence and ministers, however "In our opinion, a gap appears to be developing between the CFDS level of ambition, the evolving naval capabilities, and the budgets."²⁵

It is too new to effectively evaluate the DPS, and the NSPS was already in place when DPS was implemented. However, with open communication between departments, and trust, as the CDA report states, the biggest challenge will be to actually manage expectations on what the DPS is to achieve and how quickly it will be able to be truly implemented. One thing that is clear is that a complete review of the 2008 CFDS is required in order to establish clear priorities of procurements and to resolve the gap that is occurring between the government funding and DND capabilities.

The procurement process is only as fast and accurate as the work that is able to be completed. Increasing the capacity and improving the training of the personnel in these positions will improve the process, and the recommendations were put forth to create a dedicated, non-command, career path for procurement specialists in the Canadian military.²⁶ I would suggest this is a better function for the public service, in consideration of the fact that, even if it is a non-command path, a Canadian military personnel will only be present in any position for three to four years. Continuity and expertise could be realized with a dedicated civilian staff function.

²⁵Office of the Auditor General, 2013 Fall Report of the Auditor General of Canada, last modified 26 November 2013, http://www.oag-bvg.gc.ca/internet/English/parl_oag_201311_03_e_38797.html.

²⁶Dave Perry, "Putting the "Armed" back into the Canadian Armed Forces Improving Defence Procurement in Canada", *Conference of Defence Associations Institute*, (January 2015): 22.

THE NATIONAL SHIPBUILDING PROCUREMENT STRATEGY

From a checkered past regarding Naval shipbuilding, to a procurement system that was widely regarded as ineffective and cumbersome, when on 3 June 2010 the Government announced Canada's National Shipbuilding Procurement Strategy there were a lot of expectations on what this strategy was going to achieve for the RCN/Canadian CG, the shipbuilding industry and the procurement process.

The issues with the aging RCN fleet are not a surprise and the forthcoming paying off of four vessels will create a capability gap that cannot be mitigated inexpensively or quickly. NSPS is to provide the RCN with the Arctic/Offshore Patrol Ships, the Canadian Surface Combatant Ships, and the Joint Support Ships. The Canadian CG is also to receive their Off-Shore Science Vessels and a new Polar Icebreaker. This has been projected to cost an estimated \$37 billion over the next 20 to 30 years and contribute 15,000 jobs across Canada.²⁷

Beyond recapitalizing the RCN, "the NSPS will help the shipbuilding industry avoid the [boom and bust] cycle by creating a long-term, steady work flow that will sustain highly-skilled jobs for Canadian companies."²⁸ The strategy was also employing the Industrial and Regional Benefits (IRB) Policy wherein the shipyards are required to undertake business activities in Canada totalling 100% of the value of the contract, this will be administered by Industry Canada.

²⁷Public Works and Government Services Canada, "Backgrounder on the NSPS – Year 2: A Status Update," last modified 19 November 2014, <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/snacn-nsp-eng.html>.

²⁸Industry Canada, "Backgrounder – NSPS Economic Benefits" last accessed 29 April 2015, <https://www.ic.gc.ca/eic/site/064.nsf/eng/06843.html>.

Under the NSPS Secretariat; National Defence, Industry Canada and Fisheries and Oceans Canada would be managing the acquisition of the vessels. In addition, an independent Fairness Monitor was responsible for overseeing the selection process of the shipyards, and 3rd party experts validated the entire process. Ministers were not involved in the selection to ensure fairness and transparency that illustrates that a procurement process can be apolitical.

We have seen three main objectives for the NSPS; ships for the RCN and Canadian CG, regional economic benefits, and an improvement to the procurement process. These appear to be obtainable objectives; however, are we on the correct path, and will one suffer at the expense of the others?

When on 19 October 2011, PWGSC announced Irving Shipbuilding Inc. was selected to build the combat work package and Vancouver Shipyards Co. Ltd was selected to build the non-combat vessel work package this was Phase Two in the five-phase process. The next phase was completed by January 2012 and involved the signing of the umbrella agreements, which are an arrangement where the government negotiates fair and reasonable individual contracts with the shipyards for each project that is required. The shipyard will then ensure they employ cost-saving measures for the best value propositions for Canada.²⁹

We are now into Phase Four, which is the preparation of the shipyards, at a cost of

²⁹Public Works and Government Services Canada, "Backgrounder on the NSPS – Year 2: A Status Update," last modified 19 November 2014, <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/snacn-nsps-eng.html>.

\$500 million, and finalizations of the designs moving onto the fifth and final phase, the actual construction of the ships. As PWGSC stated “the approach and selection process represents a unique and innovated way of conducting large procurements.”³⁰ The process was unique because no contracts were signed when the shipyards were announced or when the umbrella agreements were signed. As well, while the building of the ships will occur in Canadian shipyards, the systems engineering and integration could be contracted elsewhere. This is where critics have raised concerns that the strategy at first blush creates the shipbuilding jobs, but the higher-priced innovated systems benefits could go to foreign sources.

One of the risks of the NSPS, as identified by the Auditor General, is that, early in the option analysis phase of the process in 2007, rough estimates were made by National Defence based upon past ship constructions. These rough estimates have now been treated as budget caps and have not been revised; if these caps are not adjusted, capabilities will be lost. The Auditor General is not the only office to have recognized the issues with funding and capability.

In February 2013, the Parliamentary Budget Officer (PBO) released the *Feasibility of Budget for Acquisition of Two Joint Support Ships*. The PBO determined that the \$2.6 billion budgeted by DND for the replacement of the *Protectuer* class was insufficient and they stated that the project would, in fact, cost approximately \$4.13 billion. The option for a third ship was unrealistic and that, to achieve two ships within

³⁰Public Works and Government Services Canada, “Backgrounder on the NSPS – Year 2: A Status Update,” last modified 19 November 2014, <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/snacn-nsps-eng.html>.

the budget, would see a reduction in capabilities.³¹

The 2013 report is not the only report that the PBO has completed on the Naval shipbuilding process. In October 2014, they released a *Budget Analysis for the Acquisition of a Class of Arctic/Offshore Patrol Ships* which determined that the \$3.1 billion budgeted for the project will not be sufficient to procure the six to eight A/OPS as planned. In addition, if there are delays the budget will allow for only four ships and if there were delays of over a year then we would only be able to afford three. The PBP determined that the budget would need to be increased by \$470 million in order for at least six ships to be constructed.³² The government finally acknowledged this determination because in their 16 January 2015 Technical Briefing they reiterated the project was complex and that they are committed to the best value for the taxpayers. Additionally, they increased the project budget by \$400k, which they were quick to point out that the funding was to come from DND's accrual envelope and was not going to affect any other projects. This is an important point, for it can be seen how the government was very careful in letting taxpayers know that the money was coming from internal sources and they would not have to allocate more to the increase.

The JSS and AOPS projects are both experiencing issues with capacities and budget allocations and their designs and start time will be within this decade. This brings us to the Canadian Surface Combatant (CSC) and the complexities of designing and constructing a large warship.

³¹Office of The Parliamentary Budget Officer, "*Feasibility of Budget for Acquisition of Two Joint Support Ships*," (Ottawa: Canada, 2013), 1.

³²Office of The Parliamentary Budget Officer, "*Budget Analysis for the Acquisition of a Class of Arctic/Offshore Patrol Ships*," (Ottawa: Canada, 2014), 2.

Vice-Admiral (Ret'd) Peter Cairns, President of the Shipbuilding Association of Canada addressed this issue by stating, “the costs of the CSC was set in 2004 to 2006 for a vessel that will start construction sometime in the 2020’s...it seems next to impossible to estimate the cost of a ship whose operational requirements have only been defined in a rudimentary manner.”³³

The Auditor General also determined that the CSC budget of \$26.2 billion would not be sufficient to replace three destroyers and 12 frigates with the 15 warships of similar capabilities. With the AOPS designed as a stepping-stone for the CSC, lessons learned will need to be applied if DND is to receive the best ship for its needs.

In the 1 May 2015 NSPS Technical Briefing on the CSC, it began as they always do, the representative from PWGSC states the purpose and progress of the NSPS and in this instance, at what stage the CSC was at in the process. The representative from DND then speaks to the capabilities and how the NSPS addresses these needs, and then the Industry Canada representative highlights how many jobs will be created, the economic benefits for the country and how the NSPS and DPS are fair and transparent processes. As the 1 May brief was on the CSC the PWGSC representative stated that Irving Shipbuilding was the prime contractor and though they are responsible for the delivery of the ships, Canada will set the requirements. PWGSC then reiterated this: “I want to be clear on this point: regardless of who is executing any particular competitive process, it will be Canada who is setting the standards and ensuring that the processes are being

³³Peter Cairns, “It is always about money,” – *Canadian Sailing Transportation & Trade Logistics*, last accessed 30 April 2015, <http://www.canadiansailings.ca/?p=7860>.

conducted properly in a fair, open and transparent way.”³⁴ This was an important, for they also announced that they are pursuing options to hopefully cut steel 12 months sooner by streamlining the procurement process and using off-the-shelf equipment when feasible to reduce any developmental risk.³⁵ It this preparing Canadians for potential outside of Canada procurement in order to save money? However, if the value propositions are maintained and there is still an economic contribution to Canada, then a quicker, less expensive delivery of the ships, seems like a good proposition.

It is recognized that the NSPS is a relatively new strategy and it is hard to accurately assess if it will satisfy all objectives. The Auditor General’s report was mostly favourable of the procurement process and transparency that it provided in the selection of the Irving and Vancouver shipyards. They also concluded that the NSPS would also help sustain the Canadian shipbuilding industry. However, they cautioned, due to the budget caps that were established early in the process:

“National Defence has reduced the expected number of military ships or their capabilities to remain within budget. As a result, cost/capability trade-offs need to be monitored and revisions made to project budgets, if necessary, to make sure that Canada gets the military ships it needs to protect Canadian interests and sovereignty.”³⁶

It appears that the priorities of the Government are negatively influencing the capabilities of the RCN, however, are the *Made in Canada* requirements truly the

³⁴Public Works and Government Services Canada, “NSPS Technical Briefing on Canadian Surface Combatant- Speaking Notes 1 May 2015,” last accessed 7 May 2015, <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/na-sp-05-01-eng.html>.

³⁵*Ibid.*

³⁶Office of the Auditor General, 2013 Fall Report of the Auditor General of Canada, last modified 26 November 2013, http://www.oag-bvg.gc.ca/internet/English/parl_oag_201311_03_e_38797.html.

best value for taxpayer's dollars? We will look at the Australian example to see what their revelations are on the subject.

OFF-SHORE BUILDING

Not surprisingly Canada's allies are experiencing many of the same issues pertaining to both Defence procurement and shipbuilding. The Australian Department of Defence is in the early stages of procuring up to 50 naval warships and submarines over the next two decades. These requirements were identified in the 2009 and 2013 Defence White Papers. The Australian government asked the RAND Cooperation in 2014 to conduct an analysis to determine if Australia should support a domestic naval shipbuilding industry or procure ships from foreign shipbuilders. Important questions as well had to addressed, for example if there was a sufficient capacity in both the workforce and facilities to sustain the demands that would be made over the next two decades.³⁷

The results of this study were released in April 2015 and its findings are interesting from a Canadian perspective. The Australian model is quite similar to Canada's, particularly how both have a boom and bust shipbuilding industry and both Navies are experiencing capability gaps due to equipment issues. A number of metrics were utilized and other countries naval shipbuilding industries were examined (Canada's was not). There were four main findings from the study, which concluded that the cost of building ships is up 30 to 40 percent over other markets;

³⁷J. Birkler, *et al.*, *Australia's Naval Shipbuilding Enterprise: Preparing for the 21st Century*, (Santa Monica: RAND Cooperation, 2015), Summary.

however, this could drop over time. The economic benefits were unclear at this time, though as many as 2000 people could be employed in long-term positions. The building of ships locally would avoid dependence on foreign sources and that sustaining the industry with multiple shipyards would require a specific strategy in order not to incur closures and large job losses.³⁸

This report identified the complexity of naval shipbuilding and the issues that are faced from the design, costing and manufacturing perspective. In addition, the integration of communications, combat and weapons systems only adds to the challenges that shipbuilders encounter. Three options were presented and they will be examined by the Australian government and incorporated in their 2015 White Paper. It will be interesting to see what path the Australians will take and where they place their priorities.

CONCLUSION

The Canadian First Defence Strategy of 2008, the National Shipbuilding Procurement Strategy of 2010 and the Defence Procurement Strategy of 2014 all articulate the priorities of the Harper Government: the economic growth of Canadian industry, to streamline the procurement process, and the delivery of the right equipment to the CAF.

Since this time, the RCN has experienced a significant fire onboard HMCS PROTECTEUR and the announcement of the “paying off” of four ships in 2015.

³⁸*Ibid.*, 3.

The workhorse of the RCN was the *Protecteur* Class; she provided an at-sea support service that allowed the fleet to project itself and be a viable player in its operations. The loss of this capability is strongly felt and, as VAdm Norman stated in the *Defense News*, the retirement of the two ships creates “a significant gap for Canada which we need to look to mitigate as quickly and as cost-effectively as we can.”³⁹ A lease option, though not the preferred course of action, would fill the gap. The other option, though, is to simply utilize our allied partners refuelling vessels until the JSS are completed. This opens the door to the question; if we can lease this capability now, why bother constructing our own replenishers? There is no easy solution, but there can be no doubt the delays in the JSS have now impacted the RCN’s current capabilities.

The NSPS is demonstrating that defence procurement can be conducted in a fair and transparent manner and that there is a future for the Canadian shipbuilding industry. However, with the budget caps that have been imposed, the question, as time progresses, will be if the number of ships that are actually going to be constructed will be able to sustain the industry for years to come, or are we simply in another period of boom before the bust.

As the Auditor General indicated in his report, if the RCN is to receive the ships it requires, close communication will need to occur, within the members of the NSPS secretariat. However, just as within any department, the CAF is at the

³⁹David Pugliese, “Canada Seeks Naval Supply Ship Lease”, *Defense News*, last accessed 30 April 2015, www.defensenews.com/story/defense/naval/ships/2015/02/14/canada-navy-supply-protecteur-preserver-commercial-gap/23224099.

mercy of government budgets, and, as we know, there are no guarantees in politics.

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