



NATIONAL SHIPBUILDING IN CANADA WHY DOES IT TAKE SO LONG AND COST SO MUCH?

It has been almost 10 years since the Conservative government announced the National Shipbuilding Procurement Strategy (NSPS). Much to the relief of NSPS supporters, the Liberal government did not end the program when it was elected in 2015, although it is now referred to as the National Shipbuilding Strategy (NSS). It might be time to review the basics of the program.

In the cost-cutting days of the 1990s and early 2000s, the fleets of the Royal Canadian Navy (RCN) and Canadian Coast Guard (CCG) received little attention. This meant that the ships were becoming increasingly old and increasingly expensive to maintain. The announcement of the \$33 billion NSPS in June 2010 was welcomed as a major plan to renew (recapitalize) the fleets of both the RCN and CCG. In addition, the strategy was also designed to stop the boom-and-bust cycle in Canadian shipyards, a longstanding cycle in which shipyards would be incredibly busy for a few years and then there would be a drought of a decade or more during which skilled personnel and technical expertise would be lost. Another goal of the NSPS was to create employment and ensure that Canada would continue to have capacity in a strategic industry.

The NSPS was broken into three components: combat ships; non-combat ships; and small ships (less than 1,000 tonnes displacement). The contract(s) to build over 100 smaller vessels, valued at \$2 billion, was to be offered for competitive bidding by shipyards not affiliated with the shipyards selected to build the large vessels.

In October 2011 the government announced its decision on which shipyards would undertake the large ship projects. Halifax Shipyard (Irving Shipbuilding) was selected for the biggest part of the NSPS – the combat ships, consisting of 6-8 Arctic Offshore Patrol Ships (AOPS) and 15 Canadian Surface Combatants. Vancouver Shipyards (Seaspan) was selected to build the non-combat ships, including the following:

- 3 Offshore Fisheries Science Vessels;
- 1 Offshore Oceanographic Science Vessel;
- 2 (with the option for a third) Joint Support Ships; and
- 1 Polar Icebreaker.

In February 2012, the government signed ‘Umbrella Agreements’ with Irving and Seaspan that were to define the working relationship and the administration of the projects. After this both Irving and Seaspan began massive updating of their facilities. The facilities had to be updated because it had been a long time since major projects like this had been undertaken and the shipyards needed to incorporate modern equipment and technology to enhance their capacity to build the ships.

As the shipyards upgraded, work proceeded on the design of the ships. On the West Coast it was decided that the Offshore Fisheries Science Vessels (OFSVs) for the CCG and the Department of Fisheries and Oceans (DFO) would be built first. The first of these ships is named CCGS *Sir John Franklin* and was launched in December 2017. After sea trials the ship was

delivered to the Canadian Coast Guard on 27 June 2019. This was the first large vessel delivered under the NSS. The second OFSV, CCGS *Captain Jacques Cartier*, was handed over to the CCG in December 2019. The construction of the third OFSV began in February 2017 and it is scheduled to be delivered to the CCG in August 2020.

Seaspan is also building the RCN support ships. In June 2013, the design of the Joint Support Ships (JSS) was announced. Canada will use the German *Berlin*-class design, adapted to Canadian circumstances. Initially the plan was to call it the *Queenston*-class, but in 2017 the RCN returned to the former *Protecteur*-class designation, and the ships will have the same names – HMCS *Protecteur* and HMCS *Preserver* – as their predecessors. It was originally planned that the ships would achieve full operational capability in 2019 but that has been pushed back several times. Construction of large segments of the ship, known as early blocks, commenced in June 2018 to improve schedule and mitigate a production gap within the shipyard. In early 2019, the government of Canada made a decision to re-sequence construction of the JSS and Offshore Oceanographic Science Vessel (OOSV) at Seaspan in order to build on the momentum underway with the construction of JSS early blocks. Under the revised sequencing, JSS 1 will be constructed first, followed by construction of the OOSV and then JSS 2. Work on JSS 1 continues and the ship is expected to be delivered in 2023.

This was not part of the NSS but, given the early retirement of the oil replenishment (AORs)/supply ships HMCS *Protecteur* and HMCS *Preserver* in 2014, and the slow progress on the JSS, the RCN no longer had ships to provide at-sea re-fueling for the fleet. The situation for the RCN had become acute. Because of this, in June 2015 the government announced that it was in negotiations with Chantier Davie Shipyards in Quebec to convert and provide a commercial supply ship to support the navy as an interim solution. MV (Naval Replenishment Unit/NRU) *Asterix*, the interim supply ship, was welcomed by the RCN in March 2018, and is now operational on an extremely busy schedule. (See Briefing Note #11 for more information about *Asterix*.)

Despite objections from both Irving and Seaspan, in August 2019 the government announced the start of a competitive process to build six new medium and heavy icebreakers for the CCG, thus officially opening up the NSS to a third naval shipyard. In December 2019 the government announced that Chantier Davie had pre-qualified to become the third partner in the NSS and would, once the paperwork is completed, build the CCG icebreakers. Chantier Davie now moves to the next stage in the selection process, the Request for Proposal and evaluation stage. Once this phase is successfully completed, the government will begin negotiations for an agreement to commence the build, which is expected to be in place in late 2020.

On the East Coast, the first ships being built at Irving Shipbuilding are the Arctic Offshore Patrol Ships (AOPS), the *Harry DeWolf*-class. In July 2012, a preliminary contract was signed to enable Irving to conduct a review of the existing design and specifications, and create an execution strategy for the AOPS project. The first ship of the class, HMCS *Harry DeWolf*, was launched in mid-September 2018, and continues to undergo sea trials before being handed over to the RCN in spring 2020. The second AOPS – HMCS *Margaret Brooks* – has been constructed and is now sitting in the water alongside Irving Shipyard. The third AOPS – HMCS *Max Bernays* – is also well into the construction process. It was thought that only five of the ships would be constructed, but in fall 2018 it was announced that a sixth ship would be built. In May 2019, the federal government announced that two more AOPS would be built, but they would be for the Canadian Coast Guard. (See Briefing Note #14 for more discussion of the AOPS.)

Following the AOPS will be the construction of the Canadian Surface Combatants (CSC),

the biggest element of the NSS. This project is to replace and update the capabilities found in both the *Iroquois*-class destroyers (which have already been retired from service) and the *Halifax*-class frigates. After some delay, the government sent out a Request for Proposals with a deadline of 30 November 2017. Bids were submitted by Spanish, Dutch and British companies. Spain offered its F-100 *Christopher Columbus*-class frigate; the Dutch, the *De Zeven Provinciën*-class frigate; and Britain, the Lockheed-Martin/BAE consortium Type 26 frigate. In the fall of 2018, the government selected the Lockheed Martin Canada/BAE Type 26 design to be built at Irving's Halifax shipyard. The government and Irving will work with Lockheed Martin Canada to customize the ship design to meet Canada's requirements. This design work is expected to take three to four years to complete. Construction is set to begin in the early 2020s. (For more information on the CSCs, see Briefing Note #9.)

The government has also been receiving boats from the small boat construction component of the NSS. In July 2015, the government announced that it had awarded two contracts – one to Hike Metal Products in Wheatley, Ontario, and the other to Chantier Naval Forillon in Gaspé, Quebec – to build six vessels (with an option of four more) of the next generation of CCG search and rescue lifeboats. In 2017 the first new CCG search-and-rescue lifeboats were launched, and the last of the seven hydrographic survey vessels for the CCG was delivered in spring 2017.

This is where we stand with the NSS as it begins its tenth year. (If you wonder why the process of building ships is so slow and tends to go over budget, read Briefing Note #7 about shipbuilding in Canada.)