



National Shipbuilding Strategy (NSS)

Amid the Canadian government's budget cuts and cost-cutting measures of the late 1990s and early 2000s, the fleets of the Royal Canadian Navy (RCN) and Canadian Coast Guard (CCG) suffered a period of ageing and deterioration. In response to the clear need to modernize the fleet, the government of Prime Minister Stephen Harper announced the National Shipbuilding Procurement Strategy (NSPS) in June 2010. The strategy endured through the 2015 transition of federal power, with the election of Prime Minister Justin Trudeau. Now called the National Shipbuilding Strategy (NSS), the program is a decades-long process and commitment which will, once complete, have seen billions of dollars invested into the renewal of both Canada's shipbuilding industry as well as its federal fleets.

The NSPS had five high-level objectives. In addition to revitalizing the Canadian shipbuilding industry and rebuilding the RCN's and CCG's fleets, it also pledged to create a long-term strategic relationships with two Canadian shipyards, ensure the realization of those shipyards' commitments to the defence industrial objectives, and foster economies of scale and maximize the project's value for taxpayers. In doing so, it would direct its focus on three elements of the federal fleet: combat vessels, non-combat vessels, and small vessels with displacements of under 1,000 tonnes. The latter category would have its own competitive bidding process, with the contract(s) for the construction of the more than 100 small vessels (valuing at \$2 billion overall) to be offered and issued to shipyards not affiliated with those ultimately selected to construct the larger vessels. For the larger vessels, there were five prospective shipyard bidders across Canada that would conceivably be of sufficient size and capability to put forth proposals, from which two bids – and two shipyards – would be selected. The ensuing process was, for many, a surprisingly successful Canadian procurement story. The process was transparent, open, fair, and devoid of political interference and engagement. What the process lacked, however, was adequate and effective communication, particularly on the part of the Canadian government in sufficiently informing Canadians that the selection of shipyards and issuance of contracts was only an initial step in a decades-long process, and that the initial cost estimates for individual projects were just that – only estimates, subject to change. These are messages with which the government continues to struggle in conveying to Canadians, exposing it to broad and pervasive criticism that its procurement process suffers from widespread cost overruns and schedule delays that are preventing the vessels' timely construction and delivery to the RCN and CCG.

In October 2011, the Canadian government declared its selection of the two shipyards that would shoulder the responsibility for completing the large ship projects, with the initial near-term work estimated at over \$30 billion. Irving Shipbuilding Inc. (ISI) of Nova Scotia would undertake the construction of the combatant ships, namely the Canadian Surface Combatants (CSC) [now River-class destroyers] and six to eight Arctic and Offshore Patrol Ships (AOPS) – the largest component of the NSPS. Meanwhile, British Columbia's Seaspan Shipyards would construct the non-combat vessels, including three Offshore Fisheries Science Vessels (OFSVs), one Offshore Oceanographic Science Vessel (OOSV), two (and possibly three) Joint Support Ships (JSSs), and one Polar

Icebreaker. This announcement was followed, in February 2012, by the government’s signing of “Umbrella Agreements” (UAs) with both shipyards to delineate their working relationship, as well as the projects’ administration. Commitments in hand, ISI and Seaspan both commenced significant upgrades to their shipyard facilities, modernizing their technology and equipment to elevate their capacity and efficiency – a crucial task, since it had been many years since the shipyards had undertaken major projects. As those upgrades advanced, work progressed on the ships’ designs.

At Seaspan, construction began first on the three OFSVs destined for the Coast Guard and the Department of Fisheries and Oceans (DFO). The first, CCGS *Sir John Franklin*, was launched in December 2017 and delivered to the CCG on June 27, 2019, following its sea trials, making it the first large vessel to be completed and delivered under the NSS. CCGS *Captain Jacques Cartier*, the second OFSV, was delivered to the CCG in December 2019, while the third, CCGS *John Cabot*, was handed over in October 2020. The OFSVs thus had the distinction of being the first complete class of ships to be constructed under the NSS.

Seaspan’s work on the JSSs, OOSV, and Polar Icebreaker is ongoing. The design for the JSSs – the replenishment support ships for the RCN – was announced in June 2013, following the selection of the German Berlin-EGV-class design, with adaptations for Canadian operational needs. Initially to be named HMCS *Châteauguay* and HMCS *Queenston*, the vessels were re-designated as the future HMCS *Preserver* and HMCS *Protecteur* in 2017 following the federal transition of power. Though the vessels were initially intended to become fully operational in 2019, these plans have been deferred on several occasions, with construction of the early blocks only beginning in June 2018, while the third OFSV was being built.

In early 2019, the Canadian government decided to adjust the construction sequence at Seaspan, prioritizing the construction of the first JSS, given the RCN’s urgent need for support vessels, to be followed by the singular planned OOSV and thereafter the second *Protecteur*-class JSS vessel. Despite delays, there has been progress on the future HMCS *Protecteur*. The initial “grand-block” (formed by the joining of four large blocks) was assembled in November 2019, the keel was laid in January 2020, and the final bow unit was connected to the remainder of the hull towards the end of 2021, thus completing the vessel’s forward end. The engine room capping was concluded in March 2022, its first superstructure block was raised in mid-April 2022, the mast section had been hoisted by crane by March 2023, and an April 2023 announcement revealed that the hull was now assembled and in one piece. According to a May 2024 update from Seaspan, the final significant structural block installation was completed in the autumn of 2023, and construction is now focusing internally on the installation of piping and cables, with HMCS *Protecteur* expected to launch in late 2024.¹ HMCS *Preserver*, the second JSS vessel, is expected to be completed by 2027, after its construction commenced in May 2022.²

The initial plans had envisioned Seaspan also constructing a heavy or polar icebreaker, to be designated CCGS *John G. Diefenbaker*. However, the federal government removed this icebreaker from Seaspan’s planned work schedule in June 2019. In compensation, Seaspan was granted the opportunity to construct an additional 16 Multi-Purpose Vessels (MPVs) for the CCG, following the completion of the Navy’s JSSs. The following February, the Government of Canada issued a call to shipyards to compete for the opportunity to construct the Polar Icebreaker, with ISI, Seaspan, and Quebec’s Chantier Davie all responding with interest. Finally, in May 2021, the

government revealed that two – rather than the initially planned one – heavy icebreakers would be constructed, one at Davie and the other at Seaspan. The agreements were signed in April 2023, and though the intent is for the icebreakers to be available by 2030, it is unclear whether this will be feasible.

In August 2019, the government launched a new competitive process for the construction of an additional six medium icebreakers for the CCG. The NSS's participants would therefore be expanded to include a third shipyard – propelled, in part, by political interference and pressure on the federal government to incorporate a third shipyard into the program. Chantier Davie pre-qualified and thus joined the NSS as the contractor responsible for the production of medium icebreakers. In the interim, Chantier Davie converted three medium icebreakers to supplement the CCG's existing fleet. Thanks to this further component of the NSS, the CCG has welcomed CCGS *Captain Molly Kool*, CCGS *Jean Goodwill*, and CCGS *Vincent Massey*, the latter of which was delivered in 2022 and commissioned the following year.³ As previously mentioned, Chantier Davie will also construct one of the NSS's heavy icebreakers, intended for availability by 2030.

Meanwhile, on Canada's East Coast, Irving Shipbuilding set to work on building the Harry DeWolf-class AOPSs. Initially, only five of the planned six to eight ships were to be constructed, until the government added a sixth vessel in the autumn of 2018 and, in May 2019, announced the addition of another two vessels, for the CCG. Irving delivered its first AOPS, HMCS *Harry DeWolf*, to the RCN on July 31, 2020, with the vessel commissioned in June 2021 following sea trials. Two months after commissioning, it embarked on its first major operational deployment, sailing from Halifax through the Northwest Passage before proceeding southward along the Pacific coast and through the Panama Canal, successfully completing a full circumnavigation of North America with its return north to Halifax. The second AOPS, HMCS *Margaret Brooke*, was launched on November 10, 2019, completing its sea trials before being handed over to the RCN and commissioned in October 2022. HMCS *Max Bernays*, the third DeWolf-class vessel, was launched in October 2021, delivered to the RCN in September 2022, and commissioned on May 3, 2024.⁴ The fourth AOPS, HMCS *William Hall*, was also commissioned not two weeks later, after being launched in November 2022 and transferred to the RCN in August 2023.⁵ Still awaiting commissioning are the fifth AOPS, HMCS *Frédéric Rolette*, which was laid down in June 2022 and launched in December 2023, and the sixth and final of the RCN's DeWolf-class vessels, the future HMCS *Robert Hampton Gray*, which remains under construction and was laid down in August 2023. Though Irving has shown impressive progress in the construction of these vessels, this progress has not come without complication.

The DeWolf-class has experienced problems with its diesel generators, communications system, freshwater generator, and fire suppression system. For instance, in August 2022, HMCS *Harry DeWolf* was forced to return to Halifax after setting course for an exercise in the Canadian Arctic, due to diesel generator difficulties that were then linked to the engine cooling system and identified to also affect HMCS *Margaret Brooke* and HMCS *Max Bernays*. HMCS *Max Bernays* has also experienced complications with its bow thruster, which allows the vessel to manoeuvre laterally and is thus instrumental in berthing and unberthing activities. However, such challenges are to be expected upon the introduction of a new class of warship. None are insurmountable, and all either have been or will be remediated in 2024, with HMCS *Harry DeWolf*, HMCS *Margaret Brooke*, and HMCS *Max Bernays* all returning to service in 2024 after remaining alongside in Halifax in 2023 for the necessary repairs.⁶ Indeed, HMCS *Margaret Brooke* departed on January 12, 2024,

for a six-week deployment to the Caribbean region with Operation *Caribbe*, playing a key role in Canada's participation in the multi-national counter-narcotics operation.

Once the final AOPS is completed, Irving will shift its focus and resources to the most complex and sizable element of the NSS: the construction of the Canadian Surface Combatants (CSC) [named River-class destroyers in June 2024] to replace, update, and combine the capabilities of the *Halifax*-class frigates and the already retired *Iroquois*-class destroyers. Irving and the Canadian government jointly issued a Request for Proposals, with a deadline of November 30, 2017. The Lockheed-Martin Canada/BAE Systems Canada's Type 26 frigate design ultimately triumphed and was selected in the autumn of 2018 over its competitors, the F-100 Christopher Columbus-class frigate design submitted by a Spanish designer and the Dutch designer's De Zeven Provinciën-class frigate design. Together with Irving and the Canadian government, the Lockheed-Martin Canada/BAE Systems Canada team has been working to customize the vessel's design to incorporate Canada's distinct needs. Preliminary details of the design were released in November 2020, the design review concluded at the end of 2022, and June 28, 2024, saw the commencement of construction on the production test module. The fleet of CSCs will consist of 15 vessels. With full-rate production scheduled to launch in 2025, the first vessel, HMCS *Fraser*, is anticipated to be delivered in the early 2030s, with the final ship expected by 2050.⁷

In addition to these large vessels, the Canadian fleet has also received new boats from the NSS's small boat construction element. In July 2015, the Canadian government announced the awarding of two contracts for the construction of the CCG's next generation of search-and-rescue lifeboats, to Ontario's Hike Metal Products and Quebec's Chantier Naval Forillon, with the first lifeboats being launched in 2017. Ontario's Kanter Marine Inc. also delivered in mid-2017 the last of its seven hydrographic survey vessels to the CCG, just over a year after it was awarded the contract.⁸

Thus, while the NSS is a decades-long process, and there is much work to still be done, there are clear signs of progress in the ongoing renewal of Canada's federal fleet. The RCN and CCG have benefitted – and will continue to benefit – from the billions of dollars in investments into revitalizing their fleets, bringing similar enhancements in capacity and capability to the nation's shipbuilding industry. Certainly, schedule delays have occurred, and these delays, in conjunction with inflation and technical and programmatic challenges, have contributed to rising costs for the NSS projects. These delays and increasing expenses have elicited ire from the strategy's critics. However, these difficulties are not unique to Canada, and constructing advanced vessels and warships is inherently a complex and challenging task. Having a sustainable and dynamic shipbuilding and ship repair industry is key for Canada's economic prosperity, defence, and security as a maritime state, as is having a modern and capable fleet of naval and coast guard vessels. Fortunately, the National Shipbuilding Strategy has made – and will continue to make, if current plans are maintained – substantial progress towards both necessities.

References

¹ "Delivering the New Protecteur-Class to the Royal Canadian Navy," Seaspan, May 23, 2024, <https://www.seaspan.com/stories/delivering-the-new-protecteur-class-to-the-royal-canadian-navy/>.

² The delays in the JSS vessels' construction, combined with the retirement of its former supply and replenishment ships, meant that the RCN lacked the capabilities required to ensure its fleet had at-sea support. Consequently, the

government, in June 2015, announced that Quebec’s Chantier Davie Shipyards would convert a commercial container ship in order to provide the RCN with its requisite support in the interim. The RCN thus welcomed MV (Naval Replenishment Unit/NRU) *Asterix* in March 2018. It remains operationally busy supporting the Navy. This conversion was not part of the NSS. For more on MV *Asterix*, see Briefing Note #11.

³ Canadian Coast Guard, News Release: “Canadian Coast Guard Ship *Vincent Massey* Joins the Icebreaker Fleet,” Government of Canada, October 17, 2022, <https://www.canada.ca/en/canadian-coast-guard/news/2022/10/canadian-coast-guard-ship-vincent-massey-joins-the-icebreaker-fleet.html>; “Canadian Coast Guard Commemorates the Commissioning of CCGS *Vincent Massey*,” Vanguard Canada, September 17, 2023, <https://vanguardcanada.com/canadian-coast-guard-commemorates-the-commissioning-of-ccgs-vincent-massey/>.

⁴ Department of National Defence, News Release: “HMCS *Max Bernays* Commissioned Today in Vancouver, B.C.,” Government of Canada, May 3, 2024, <https://www.canada.ca/en/department-national-defence/news/2024/05/hmcs-max-bernays-commissioned-today-in-vancouver-bc.html>.

⁵ Department of National Defence, News Release: “HMCS *William Hall* Commissioned into Service in Halifax, N.S.,” Government of Canada, May 16, 2024, <https://www.canada.ca/en/department-national-defence/news/2024/05/hmcs-william-hall-commissioned-into-service-in-halifax-ns.html>.

⁶ The expense for the repairs for HMCS *Harry DeWolf* and HMCS *Margaret Brooke* has fallen to the Canadian government, given the expiration of ISI’s one-year warranty on those vessels. See Lee Berthiaume, “Ottawa Will Pay for Repairs to Navy’s New Arctic Ships Due to Expired Warranty,” CTV News, March 6, 2023, <https://www.ctvnews.ca/politics/ottawa-will-pay-for-repairs-to-navy-s-new-arctic-ships-due-to-expired-warranty-1.6301443>.

⁷ Department of National Defence, News Release: “Construction Begins for Canada’s New Warship Fleet – the River Class Destroyers,” Government of Canada, June 28, 2024, <https://www.canada.ca/en/department-national-defence/news/2024/06/construction-begins-for-canadas-new-warship-fleet--the-river-class-destroyers.html>; Public Services and Procurement Canada, “Canadian Surface Combatant,” Government of Canada, last modified June 28, 2024, <https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/mer-sea/sncn-nss/navcom-surfcom-eng.html>.

⁸ Nick Blenkey, “Canada Orders Seven Hydrographic Survey Vessels,” Marine Log, April 22, 2016, <https://www.marinelog.com/news/canada-orders-seven-hydrographic-survey-vessels/>; Public Services and Procurement Canada, “Hydrographic Survey Vessels,” Government of Canada, last modified July 26, 2022, <https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/mer-sea/sncn-nss/hydrogra-nvires-eng.html>.