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Lines of Defence: A Policy Agenda for Canada's Defence Capabilities

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The NATO Association of Canada

Lines of Defence: A Policy Agenda for Canada's Defence Capabilities

The **NATO** Association of Canada Association | Association Canadienne pour L'**OTAN**

The NATO Association of Canada is an independent, non-profit, non-governmental organization dedicated to the idea that the transatlantic relationship between Canada, the United States, and the nations of Europe is of critical military, economic, and cultural importance to Canadians. The Association's mandate is to promote a broader and deeper understanding of international peace and security issues relating to NATO.

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Executive Summary

Amid a precarious geopolitical climate, rapidly evolving threats, and American demands for greater Allied defence burden-sharing, rebuilding Canada's national defence capabilities is a necessity if Ottawa is to avoid strategic disadvantage. Accordingly, the NATO Association of Canada has convened this task force to assess policy options that enhance defence capabilities in a sustainable and efficient manner.

The first pillar of the report provides a detailed assessment of Canadian defence expenditure and existing plans to raise it in accordance with NATO standards. As Ottawa has now reached the 2% of GDP defence commitment announced by Prime Minister Mark Carney in 2025, it finds itself among only eight NATO members currently falling below the 2% GDP commitment. This is primarily due to a lean personnel structure and low investment in capital-intensive items, such as infrastructure or research and development (R&D). When compared to other NATO members recently meeting their alliance commitments, substantial equipment acquisition, construction of training facilities, and R&D assistance to Ukraine stand out as key investments that have boosted members' expenditure. Ottawa's comparatively low investment into major equipment (18.6% of defence expenditure as of 2025) further highlights their funding lagging behind the 20% NATO target. The resulting proposal is organized development of structured and actionable frameworks supporting planned budget growth that aligns with the 2% GDP and 20% equipment target while maintaining fiscal responsibility.

The second pillar outlines a detailed plan to streamline and accelerate procurement for the Canadian Armed Forces (CAF), creating a reliable system built for the volatile global security environment. Beset by bureaucratic inefficiencies, the current system must be reimagined to guarantee efficiency. Our plan begins with the consolidation of procurement under the Minister of National Defence, then enacts selective exemptions to bureaucratic layers that increase costs. As a result, operational requirements will be overseen by technical experts before rapid deployment of new equipment to CAF members in the field. These changes will serve as an effective placeholder in advance of other long-term restructuring efforts by the Government of Canada.

The third pillar details a cost-effective allocation strategy for the expanded defence budget, improving the capabilities of the CAF in all operational domains. Given its heavy operational expenditure, military funds should be focused on addressing critical capability gaps, including a modern submarine fleet, munitions, artillery, recruitment, and base infrastructure. Major investments in these key areas will propel spending to meet the 20% equipment target, while further boosting expenditure to meet 2% of GDP. Establishing partnerships with fellow NATO members and Canadian universities will also serve to boost innovation capacity and ensure best practices are applied to managing newly acquired assets.

The fourth pillar proposes the deployment of technical defence solutions that improve the ability of the Department of National Defence (DND) to respond to emerging, multifaceted threats. These include closing technical gaps through enhancement of digital infrastructure, building space defence and surveillance capacity, and boosting civil society cooperation to withstand non-traditional threats, such as climate change. Through expanded capabilities and access to subject matter expertise, the CAF will find itself able to rapidly design flexible responses.

The final pillar addresses the ongoing debate on securing Canada's Arctic territory from future encroachment through establishment of a robust military presence in the region. Proposed initiatives include the construction of CFB Iqaluit in Nunavut, upgrading key Arctic ports, establishing a permanent presence of conventional forces, and accelerating acquisition of air defence

assets. By addressing this key deficiency in our continental defence, it is expected that American concerns will be assuaged while extending the NATO deterrent to previously unthreatened areas. In short, these policy recommendations aim to modernize CAF capabilities, cement Canadian territorial defence, minimize bureaucratic slowdown, and restore the treasured relationship between Canadian society and its protectors. ■

Introduction

An in-depth assessment of NATO's European and Canadian defence expenditure data from the 2024 collection period forecasted 8.6% real growth to aggregate defence expenditure between 2023 and 2024 (NATO, 2024). This increase is part of the rising trajectory of aggregate defence spending for the European allies and Canada, as more member states and allies commit to increasing their defence expenditure rate (as a percentage of GDP) (Reuters, 2024). While aggregate defence expenditure is estimated to experience significant positive growth, As of June 2025, Canada has officially reached the NATO guideline of 2% of GDP in defence spending as of the most recent data collection period, which concluded June 12th, 2024. Canada's rate is only a 37% increase from the country's defence spending rate ten years prior, which sat at roughly 1% of national GDP. Albeit a respectable improvement, current Canadian expenditures still fall short of the recommended 2% guideline agreed to by allies in 2014 (NATO, 2014). Additionally, Canada falls short of another 2014 commitment to spend 20% of its defence budget on major equipment and related research and development, a critical goal for ensuring that the CAF is equipped to face an evolving threat environment. To meet other allies at the 2% threshold and allocate a sufficient amount of defence expenditures to major equipment, this policy proposal outlines a pathway to a strengthened defence budget, robust capital investments, and improved CAF readiness.

By mapping the trajectory of Canada's historical defence expenditure as a percentage of its national GDP over the past ten years, this proposal recapitulates national performance in attempting to reach the recommended 2% of GDP guideline set by NATO, thereby determining a baseline for comparison with expenditure data and strategies from other allies. In highlighting Canada's level of defence spending in comparison to that of its allies, recommendations for enhancing procurement strategy are presented to improve prospects of increasing defence expenditure so the country can reach the recommended threshold complied with by a majority of NATO member states. Following the procurement strategy, this proposal identifies potential stakeholders that can be engaged to complement its policy reform recommendations as part of a broader initiative to support continuous investment in Canada's global partnerships. ■

Pillar 1: Defence Spending Overview and Incremental Budget Increases

Part A: Background of Canadian Defence Spending 2014-2024

Over the past decade, Canadian defence expenditure as a percentage of Gross Domestic Product (GDP) has shown an upward trajectory from 1% to 1.37%. This has consistently remained below the guideline agreed upon by NATO members in 2014, which aimed for all allies to reach 2% of GDP within ten years (NATO, 2025).

With the expectation that the threshold be met by 2024, 23 out of 31 NATO member states included in NATO's 2024 data collection period were projected to meet or exceed the 2% GDP defence spending commitment by the end of the collection period; only Croatia, Portugal, Italy, Canada, Belgium, Luxembourg, Slovenia, and Spain were anticipated to not meet the 2% guideline in 2024.

Table 1

Countries with Defence Expenditure as a share of GDP (%) Below 2%

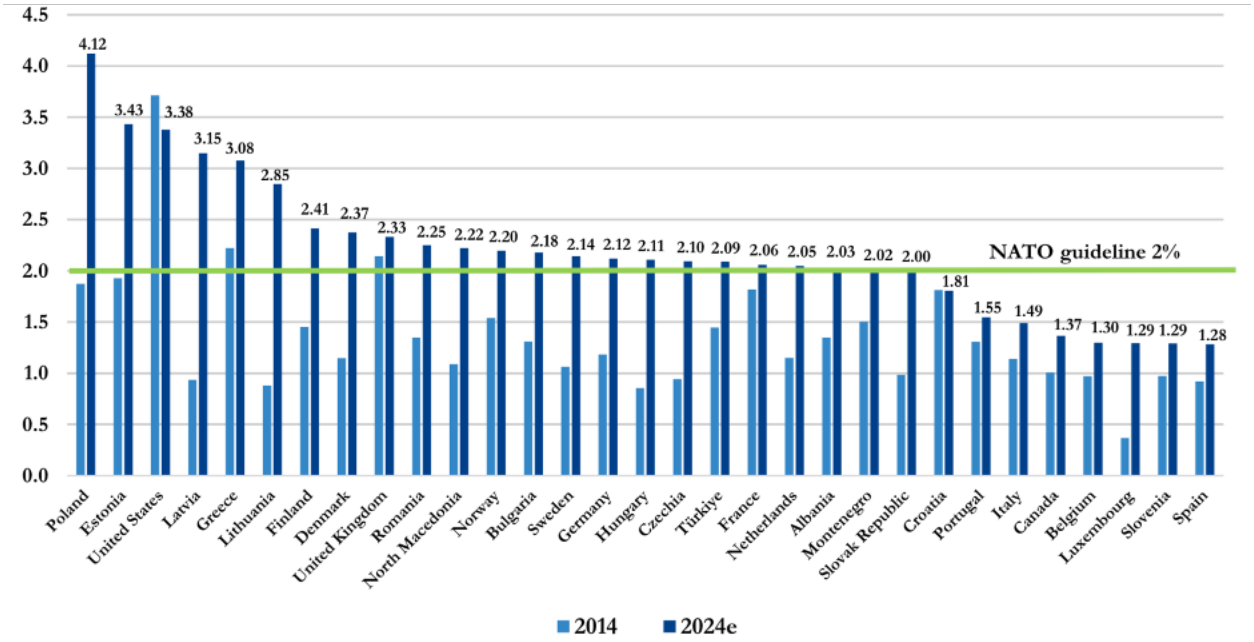
Country	2024 Defence Expenditure (as a share of GDP)
Croatia	1.81%
Portugal	1.55%
Italy	1.49%
Canada	1.37%
Belgium	1.30%
Luxembourg	1.29%
Slovenia	1.29%
Spain	1.28%

Source: Internal Elaboration, NATO Defence Expenditure of NATO Countries (2014-2024)

In 2014, the commitment to reaching the 2% guideline by 2024 was affirmed by NATO heads of state and government, but only three member states had reported a defence expenditure as a share of GDP greater than 2% as presented in Figure 1: the United States, Greece, and the United Kingdom.

Figure 1

Defence Expenditure as a share of GDP (%)



Source: NATO Defence Expenditure of NATO Countries (2014-2024)

From Canada's present 1.37% of GDP spending on defence, only 18.6% of the 1.37% is spent on equipment, which also lies below the 20% NATO guideline for equipment expenditure as a share of defence spending. Table 2 presents the breakdown of Canada's 1.37% investment in defence.

Table 2

Canada's Defence Expenditure Structure

Main Investment Category of Defence Expenditure	% of Total Defence Expenditure Per Investment Category
Personnel	43.5
Operations & maintenance and other expenditures	34.5
Infrastructure	3.4
Major equipment, including related R&D	18.6

Source: NATO Defence Expenditure of NATO Countries (2014-2024)

The structure of existing Canadian spending reveals both distinctive priorities and some alignment with comparable NATO member states. When examining the breakdown by main expenditure categories—personnel, operations and maintenance, infrastructure, and major equipment—Canada's profile emerges as one that is operationally focused, with relatively modest investment in personnel and capital-intensive items.

Table 3

Defence Expenditure Structure by Country

Country	% of Total Defence Expenditure in Personnel	% in Operations & Maintenance and other Expenditures	% in Infrastructure	% in Major Equipment, including Related R&D
Croatia	57.9	15.7	2.2	24.2
Portugal	58.6	15.6	3.9	21.9
Italy	59.4	15.6	3.0	22.1
Canada	43.5	34.5	3.4	18.6
Belgium	50.2	30.8	3.9	15.2
Luxembourg	21.4	24.4	10.7	43.7
Slovenia	47.5	20.4	2.8	27.3
Spain	43.9	23.1	2.7	30.3

Source: NATO Defence Expenditure of NATO Countries (2014-2024)

Among the bottom quartile of NATO allies with defence expenditure rates that do not meet the 2% commitment, Canada distributes its investment similarly by comparison. In terms of personnel spending, Canada allocates 43.5% of its defence budget. This is notably lower than most of its southern European peers, such as Italy (59.4%), Portugal (58.6%), and Croatia (57.9%), all of which dedicate well over half of their defence spending to personnel costs. In this regard, Canada is more closely aligned with Spain (43.9%) and Slovenia (47.5%), while Luxembourg stands as an outlier, allocating only 21.4%. This suggests that Canada maintains a leaner personnel profile compared to many of its NATO counterparts, possibly reflecting differences in force structure or compensation frameworks.

Canada stands out most prominently in the operations and maintenance category, where it allocates 34.5% of its total defence budget—the highest among the countries analyzed. By contrast, Italy and Portugal spend only 15.6%, and Belgium, the second-highest, allocates 30.8%. This high percentage likely indicates a strong emphasis on sustaining operational readiness and maintaining existing capabilities, possibly due to Canada's global engagement footprint and geographic scale.

Canada spends a relatively low 3.4% of its defence budget on infrastructure, placing it in line with countries such as Italy (3.0%) and Spain (2.7%). While Croatia spends slightly less (2.2%), Luxembourg allocates a significantly higher 10.7% to infrastructure, indicating divergent investment strategies. Canada's infrastructure spending appears consistent with the general trend among mid-sized NATO members to limit capital outlays in this area.

In the category of major equipment and related R&D, Canada allocates 18.6% of its budget. This is a middle-of-the-road figure: lower than Spain (30.3%), Slovenia (27.3%), and Luxembourg (43.7%), but comparable to Italy (22.1%) and Croatia (24.2%). Belgium spends the least at 15.2%. Canada's relatively modest investment in equipment suggests a focus on maintaining existing systems, rather than pursuing aggressive modernization or expansion.

Thus, from a preliminary analysis of Canada's defence spending from 2014 to 2024 in comparison to allies with a similar rate, what can be observed is a prioritization of operational capacity over military innovation while attempting to maintain a balanced investment profile. While countries like Italy and Portugal devote a majority of their budgets to personnel, and others like Luxembourg focus heavily on equipment and infrastructure, Canada's profile maintains more of an equilibrium across the four investment categories—leaner on personnel, high on operations, and moderate on capital expenditures—that may reflect a strategic approach centred on sustaining deployable, professional forces rather than investing in new platforms or expanding personnel numbers. Given factors such as aging CAF fleets, munitions shortages, and an ever-changing threat environment, this proposal places a focus on targeted equipment investments to both modernize key capabilities and meet NATO's 20% spending guideline on major equipment.

Part B: Comparative Study of Ally Defence Spending

Introduction. In designing a plan to raise Canadian defence expenditure towards the NATO guideline of 2% of GDP, best practices from Canada's allies will serve as a critical model of success. To this end, the Task Force has identified three member states in the alliance that had spending levels similar to today's CAF immediately prior to the 2022 Russian invasion of Ukraine (NATO, 2021). By identifying newly compliant states and their major shifts in defence expenditure over the past three years, a blueprint can be developed for Canada to meet the target in a timely and effective manner.

The three states chosen with previously comparable levels of military expenditure include the Federal Republic of Germany, the Kingdom of Denmark, and the Netherlands. The Republic of Latvia will also be included, given their consistent compliance with the target and relatively small

stature, opening the possibility for lessons in resource allocation. The methodology for the analysis includes the tabulation and ranking of states by NATO expenditure category, as well as an assessment of socio-political factors (i.e. public opinion polls and threat perception).

Germany. The Federal Republic of Germany is a foundational pillar of the European Union and wields a substantial industrial base, which has historically afforded it military and technological prowess. Broadly speaking, the German public supports increases to the military budget, with 50% of voters backing a government plan to push spending upwards of 3% of GDP (Koerber-Stiftung Institute, 2024). That said, there remains a degree of resistance to sacrificing social spending (57% opposed) and the idea of Germany taking a central military role in Europe (60% opposed) (Infratest-Dimap, 2024). Nevertheless, support for NATO in Germany remains strong, and is on an upward trend. A poll commissioned in May 2024 identified 82% of Germans as being in favour of continued membership, and though the NATO-skeptic AfD has grown considerably in its influence, this is predominantly due to immigration controversies and economic conditions.

From 2021 to 2024, Germany expanded its defence expenditure from 1.49% of its GDP to 2.12% (+0.63%). Its current spending mix includes 29.6% on personnel (4th in NATO), 38.5% on operations and MRO activities (2nd), 3.2% on infrastructure (4th) and 28.7% on research and development/other spending (4th) (NATO, 2024). Recent spending initiatives include a € 100 billion fund for defence expenditure, the abolition of its balanced budget requirement, and the acquisition of various military technologies (Cameron, 2024). These include investments in artificial intelligence, naval shipbuilding, armored vehicles, sensors, and electromagnetic warfare (Bundesregierung, 2024).

Denmark. The Kingdom of Denmark has greatly expanded its commitment to NATO following the invasion of Ukraine, with a substantial increase in defence spending and engagements in the Arctic. According to a 2020 poll, Denmark scored among the highest in its support for continued NATO membership, with 79% responding positively (Blazina, 2020). The political environment is also quite amenable to NATO interests, as parties opposing alliance commitments consistently poll at less than 5% (PolitPro, 2025). However, recent trends show additional interest in European Union-level defence projects, as a referendum passed to scrap an opt-out from EU common defence initiatives (BBC News, 2022). Further, skepticism of the United States has grown considerably since the return of Donald Trump to the Presidency, given his public demands to acquire the overseas Danish territory of Greenland.

From 2021 to 2024, Denmark increased defence spending from 1.40% to 2.37% of GDP, an increase of 0.97%. Its current spending mix includes 26.5% on personnel (5th in NATO), 41.4% on operations and MRO (1st), 2.3% on infrastructure, and 37.9% on R&D (1st) (NATO, 2024). Its recent spending initiatives include a doubling of R&D and equipment allocations from 2022 to 2023, and the softening of parliamentary spending oversight to improve procurement speed. Recent acquisitions include naval strike missiles from Norway for USD 130 million and heavy investment in the Ukrainian defence sector, totalling € 135 million for 2025 (Baird Maritime, 2025;Defense Mirror, 2025;MoD Denmark, 2024). The latter project is an ongoing Danish government strategy that aims to fund, battle-test, and diffuse new technologies from the frontlines in Ukraine (MoD Ukraine, 2025).

Netherlands. Holding one of Europe's major ports, the Netherlands holds both strategic and logistical importance to the alliance and has remained a steadfast member. According to polling, 75% of Dutch civilians support continued NATO membership and 62% support increased defence spending above alliance requirements (AP News 2024;NL Times, 2025). Considering the Russian invasion of Ukraine an immediate security threat, deterrence has been a substantial motivating factor. The Dutch are conscious of additional threats posed by China, including through cyberattacks and foreign interference campaigns undermining national discourse (Reuters, 2024b). Although the Ukraine-skeptic PVV is the largest faction in government, the remaining members and non-partisan prime minister broadly remain supportive of the alliance (Politico, 2025a). Further, anti-NATO

support is consolidated in the PVV, with aggregate election polls showing nearly double the seat count for pro-NATO alternatives.

From 2021 to 2024, the Netherlands increased its defence spending from 1.45% of GDP to 2.05% (+0.6%). Its spending mix includes: personnel expenses at 38% (2nd in NATO), operations and MRO activities at 21.9% (5th), 3.9% for infrastructure (2nd), and 36.2% on R&D (3rd). Recent spending initiatives include the acquisition of battle tanks, submarines, fighter jets, and air defence to improve capabilities in virtually all traditional domains of warfare (MoD of the Netherlands, 2024; Psaledakis & Pamuk, 2024; Reuters, 2024c).

Latvia. As a state on the far reaches of the alliance and bordering the Russian Federation, Latvia has long been a leader in European defence spending, meeting the NATO target as early as 2018 (NATO, 2021). It is also the host of CAF troops as part of Operation REASSURANCE and the Enhanced Forward Presence, a presence that will increase to 2200 soldiers by 2026 (DND, 2025). Being a former Soviet republic, the population of Latvia is keenly aware of the threat of occupation by Russia. In addition, there is a Russian diaspora in Latvia accounting for 22% of the population, which some observers suspect could be exploited by Moscow, as was the case in Ukraine (ZOIS, 2024). According to polling, Latvians are incredibly supportive of military institutions and robust defence policies, with 61% endorsing the reintroduction of conscription in 2023 and 37% endorsing expansion of EU-level defence initiatives in 2020 (Andzans, 2023) (IRI, 2020). On the political side, Latvian legislators are broadly in favour of NATO, though 29 of 100 seats in their parliament are held by Russian-centric parties and anti-EU populists. Nevertheless, the aggregate of polls firmly indicate a pro-NATO status as of December 2024 (Politico, 2025b).

From 2021 to 2024, Latvia exceeded the NATO spending target, having been compliant for several years prior to the invasion of Ukraine. Their increase from 2.14% of GDP to 3.15% represents an increase of nearly 1% in that timeframe (NATO 2021; NATO, 2024). Their spending mix includes 32.5% towards personnel (3rd in NATO), 25.4% towards operations and MRO activities (4th), 5.2% on infrastructure (1st), and 36.9% on R&D (2nd). Recent acquisitions include a layered air defence system, coastal defence, infantry modernization, and artillery. In the 2025 budget, Latvia dedicated 42% of defence expenditure towards capability development including expanding equipment, personnel expenses, and new infrastructure such as the Selonia Military Training Area (MoD of Latvia, 2024).

Canadian Assessment. In Canada, the prospect of increasing defence expenditure has been a feature of political discourse for some time, but the issue has become more imperative due to developments in the United States. Considering the vocal skepticism expressed by U.S. President Donald Trump towards joint defence initiatives, polling of popular support among Canadians for increasing military investment has dramatically improved since 2017. As of a 2023 Ipsos poll, 75% of Canadians endorse an increase in defence spending (Bricker, 2023). In an Angus Reid Institute poll, 29% of Canadians listed defence as a top priority, which was an increase of 12% from the year prior (Angus Reid, 2024). Key defence priorities for Canadians include support for Ukraine (60%) and Arctic security (73%) (Angus Reid, 2024). Further, support for alliance activities in Canada remains universal among mainstream political parties, with all represented factions endorsing expanded engagement with NATO. This coincides with an increase in suspicion of American intentions towards Canada stemming from President Trump's stated desire to make Canada the 51st state of the USA.

In spite of this, from 2021 to 2024, Canada has lagged behind its partners on defence expenditure and is one of only eight member states currently falling short of the target (NATO, 2024). In that timeframe, spending has increased only from 1.36% to 1.37% of GDP, creating an urgent deficit of support to the CAF. Currently, the Canadian spending mix includes: 43.5% on personnel, 34.5% on operations and MRO activity (3rd in NATO), 3.4% on infrastructure, and 18.6% on R&D (5th, short of 20% NATO recommendation) (NATO, 2024). Though the relative indicators in

category spending appear favourable, they are hamstrung by an overarching trend of poor funding for national defence.

Part C: Incremental Budget Increases to Reach 2.0% and Beyond

Reaching defence expenditure of 2.0% of GDP by 2026, and even beyond that level by 2028-29, will require consistent and calculated increases to the defence budget for the next four years. Many of the investments necessary to meet the spending guideline, as recommended in this proposal, are long-term projects that will require significant planning and decision-making before large amounts of government funds are spent. Backloading these investments will give DND the time required to initiate procurement of large-scale investments, such as submarines, satellites, and a top secret cloud service, while keeping the timelines short enough to maintain political accountability. These increases, while ambitious, are essential to ensure that Canada is able to protect its own sovereignty in an increasingly volatile geopolitical landscape. Investing according to the recommendations outlined in this proposal, this defence infrastructure and equipment will transform Canada from a laggard among its allies to a formidable nation capable of protecting its land, its resources, and its citizens. ■

Pillar 2: Procurement Acceleration

Accelerating defence spending at the rapid rate needed to reach 2% of GDP spent on defence by 2028-29, if not earlier, will require reform of Canada's defence procurement process to ensure that funds are invested efficiently and effectively. Canada's defence procurement is notoriously bureaucratic, slow, and inefficient, and is recognized by Canadian defence experts and allies as among the worst in the world. Exacerbating this is the fact that the Department of National Defence has not been able to spend its full budget for years and often has billions of dollars in lapsed funding at the end of each fiscal year. As mentioned in the Standing Committee on National Defence, "Between 2017–2018 and 2022–2023, there was a 'cumulative shortfall nearing $12 billion between what DND spent on capital and what was originally planned'" (Standing Committee on National Defence, 2024).

Responsibility for defence procurement in Canada is spread across numerous federal departments and agencies. DND, Public Services and Procurement Canada (PSPC), Innovation, Science and Economic Development Canada, and the Treasury Board of Canada Secretariat all play a role in defence procurement. This bureaucratic process involving a multitude of government departments is unique to Canada and stands as an obstacle to rapidly increasing defence spending on capital projects.

The Department of National Defence can only conduct its own procurement on contracts valued at up to $7.5 million (Standing Committee on National Defence, 2024). This amount is far too low and leads to the procurement processes for all significant equipment purchases being conducted through both DND and PSPC, causing delays and bureaucratic overlap. If Canada plans to aggressively increase defence spending in the next several years, rectifying delays and setbacks in the procurement process must be the first step.

Many of Canada's NATO allies conduct defence procurement through a centralized defence organization, including Denmark, Estonia, France, Germany, Italy, Spain, and the United Kingdom (Library of Parliament, 2020). Arguments for Canada to do the same are not new; large-scale procurement reform has been discussed since the 2000s, and the 2019 Liberal election platform contained a promise to create a new agency, Defence Procurement Canada (DPC) (Collins, 2019). This idea is supported by many defence experts in Canada and abroad, and in fact has been brought back to life in Prime Minister Mark Carney's 2025 election platform (Brewster, 2025).

Part A: Procurement Oversight

Ultimately, Canada should create a new federal agency with oversight of all defence procurement projects, as is done by the numerous NATO member states listed above. While not a 'fix-all' solution to Canada's procurement woes, it will be a step in the right direction that will accelerate procurement, align Canada with its allies, and set the groundwork for future changes to the structure of the Canadian bureaucracy and its processes.

Unfortunately, Canada does not have the luxury of waiting the years that it would take to set up, staff, and operate a brand-new federal agency. The urgency of the current geopolitical situation necessitates immediate action, even if only in the interim. For this reason, the Government of Canada should *immediately consolidate responsibility for defence procurement under the Minister of National Defence.* Responsibility should reside with DND rather than PSPC, because DND has the technical expertise required to define operational requirements and conduct tests of equipment. Placing responsibility for defence procurement with defence departments is a tested strategy and is currently used by countries such as Czechia and Finland.

Concretely, this means *amending the Defence Production Act to transfer exclusive authority for acquiring supplies for DND from the Minister of Public Services and Procurement to the Minister of National Defence.* This also means *transferring defence procurement staff working for PSPC to DND to ensure a streamlined chain of command.* While a host of new and revised procurement procedures will need to be created to support a centralized defence procurement agency, these recommendations are a prerequisite for the aggressive spending increases needed to reach spending targets and lay the groundwork for broader defence procurement reforms in the future.

Part B: Accelerating Specific Investments

Within the streamlined reporting structure under the auspices of the Minister of National Defence, the Government of Canada must take steps to ensure that decisions are made quickly and key procurements can be carried out at an accelerated pace. While competitive and transparent bidding processes are the foundation of all government procurement in Canada, and should remain so, existing tools should be used more frequently to bypass steps of the procurement process that lead to delays and increased costs on critical projects.

While procurement of large equipment such as ships and planes is subject to delays from design and manufacturing processes, many procurements are a matter of acquiring equipment that is either readily available or can be rapidly produced. For these purchases, the Government of Canada should *award sole-source contracts for equipment which has been demonstrated to be effective and reliable through use by other countries, and which is urgently needed to protect Canadian security.*

The most effective tool at the Government's disposal for awarding sole-source contracts is invoking a national security justification for bypassing competitive bidding. The *Government Contracts Regulations* provide two mechanisms for doing this, the first of which is the National Security Exception (NSE). The NSE is a provision found in all of Canada's international trade agreements that allows Canada to exclude a procurement from some or all of the obligations of relevant trade agreements, as well as domestic requirements for competitive bidding processes, if the equipment being procured is required for national security. Bypassing competitive bidding for important purchases can avoid delays in implementing capabilities necessary for Canada's continued security, and exempting these purchases from trade obligations allows the government to provide more targeted support to Canadian industry.

Canadian firms possess the capability to produce much of the equipment needed to protect Canadian security, from munitions producers such as General Dynamics Ordnance and Tactical Systems (GD-OTS) and IMT to armoured vehicle manufacturers like Roshel. Awarding contracts to Canadian firms can not only help to accelerate procurements but will bolster the Canadian defence industrial base and economy against threats to economic security. The Government of Canada should *invoke the National Security Exception to award sole-source contracts for key capabilities.* Furthermore, the Government of Canada should use the NSE to its full potential by *awarding contracts to Canadian firms where it is identified that they have the capacity to produce the required equipment quickly.*

In cases where no trade agreement would apply to a given procurement process, the Government of Canada can still sole-source contracts that are "indispensable to national security." In these cases, the Government of Canada should *designate essential defence equipment as indispensable to national security to award sole-source contracts and avoid capacity gaps in Canadian Armed Forces readiness.*

One justification for the use of these tools is rooted in Donald Trump's expressed desire to annex Canada. Repeated use of economic force to extract concessions from Canada shows that the Trump Administration is serious about wielding its power over Canada, and numerous public comments from Trump about NATO, NORAD, and Canadian defence spending clearly demonstrate that Canada must respond to these new threats by rapidly strengthening its military capabilities.

The National Security Exception can, and should, also be used to *exempt procurement processes for urgently needed equipment from the Industrial and Technological Benefits (ITB) requirement.* While the ITB policy is an important piece of the Canadian defence procurement process and delivers important support for economic growth, it can cause delays in the procurement process or cause suppliers to not bid on a contract at all. For large purchases, the Government of Canada should carefully consider the value of rapidly acquiring defence capabilities versus supporting regional economic development and should begin assigning a greater weight to the former criterion.

Despite the need to award sole-source contracts for several of the significant purchases contained in this framework, most of Canada's defence procurement will, and should, continue according to principles of open and competitive bidding. The designation of an investment as an Urgent Operational Requirement (UOR) is a tool that can ensure appropriate prioritization of procurement projects while maintaining transparency and competitive bidding throughout the procurement process. By assigning the UOR designation to a required capability, DND can elevate the priority of certain contracts and make purchases on an accelerated timeline.

This designation has been used to provide supplies to Canadian troops in Latvia and Afghanistan and has been demonstrated as an effective way to speed up the procurement of readily available equipment such as counter-uncrewed aircraft systems, air defence systems, C-17 heavy transport aircraft, radars, and guns (Standing Committee on National Defence, 2024). To support rapid procurement and efficient prioritization, the Government should *declare urgently needed equipment an Urgent Operational Requirement to ensure that purchases of readily available equipment recommended in this policy framework take place within the necessary timeline.*

Part C: Conclusion

Canada's unique framework for defence procurement is a product of the structures of the Canadian government and Cabinet responsibilities, shaped by the geopolitical situation that Canada found itself in at the end of World War II and the decades following. This system has its flaws, but they are not yet fatal enough to truly jeopardize Canadian security - Canada remains secure and protected despite its slow and bureaucratic defence procurement. The changing geopolitical situation, however, throws this safety into question and means that Canada can no longer afford to drag its heels when procuring essential military equipment. Our Arctic will be vulnerable if the Government is still considering new submarine options when the Victoria class reaches end-of-life, and the new F-35s will be useless for protecting Canadian airspace if they are not accompanied into service by the infrastructure and munitions they require.

In the long term, Canadian defence procurement should be closely studied and completely overhauled. The process should be mapped out, responsibilities should be clearly identified to eliminate overlap across departments, and a new federal agency for defence purchases should be created. This will take longer than the four years in this policy framework - the four years that Canada has to seriously increase its defence spending and capability to avoid being highly vulnerable in a volatile world. While these recommendations do not fix all of the woes of Canadian defence procurement, they constitute a foundation upon which to build a strong defence capacity at a rapid pace. They lay the framework for the purchases that Canada will need to make to remain competitive and protected and open the conversation for the broader changes that must come within the next decade. ■

Pillar 3: Modernizing Equipment and Enhancing Readiness

As shown in Table 3, Canada's defence spending skews heavily towards operational and maintenance spending and involves considerably less spending on personnel and equipment than many of its NATO allies. In order to reach the spending levels demonstrated by its allies, and do so in a way that matches the best practices of Allied militaries and brings Canada in line with the 20% NATO guideline, Canada should focus the bulk of its spending increases on capital-intensive equipment and personnel costs. Solutions to urgent issues, such as CAF's aging submarine fleet and personnel recruitment and retention crisis, will require massive amounts of investment and should constitute a large portion of future spending increases. By supporting these initiatives with other spending on supporting infrastructure such as CAF housing and on-base infrastructure, DND can align Canada's defence with that of its allies while improving force readiness.

Part A: Accelerate Submarine Procurement

Canada has announced plans to procure a fleet of up to 12 conventionally-powered submarines at an estimated cost of $60 billion, with the goal of awarding a contract by 2028 and receiving the first submarine by 2035. This procurement is intended to replace the aging Victoria-class submarines, which are expected to reach the end of their operational life in the mid-to-late 2030s (Shimooka, 2024). However, given the DND's track record of delays and challenges with large-scale military procurements, this timeline presents a significant risk of a capability gap, potentially leaving Canada without an effective submarine fleet for several years.

To mitigate this risk, the Government of Canada should prioritize an in-service solution that can be delivered within a timeframe sufficient to avoid operational shortfalls. The Hanwha Ocean KSS-III, produced by South Korea, is currently the only in-service submarine that meets the Canadian Patrol Submarine Project requirements and can be delivered within six years of contract signing. Alternative options such as TKMS' Type 212CD and Navantia's Isaac Peral- class may meet requirements, but their viability for Canadian procurement is hampered by long lead times for purchasing. The Type 212CD is still not in service and is already committed to extensive orders from Germany and Norway, while Navantia is unlikely to meet Canada's required delivery timeline (Shimooka, 2024; Luck, 2024). Given these limitations, the only viable option is to move forward with the KSS-III.

To ensure a timely procurement process, the Department of National Defence should *sole-source the submarine purchase and accelerate the contract award to 2026, rather than the currently planned 2028*. Utilizing a sole-source approach under the National Security Exception (NSE) could enable Canada to allocate an estimated *$5-10 billion per year towards this acquisition beginning in 2027* (Shimooka, 2024). Accelerating this purchase would be a significant improvement to investment on equipment and would be sufficient on its own to bring Canada's equipment spending above the 20% guideline, even at the overall spending levels recommended by this proposal. This strategy would not only secure submarine capabilities before the Victoria-class fleet is retired but also enhance Canada's ability to

project power and contribute to Allied maritime security efforts in an increasingly uncertain geopolitical environment.

Part B: Expand the Munitions Supply Program

Canada has announced a $9.5 billion investment to enhance its munitions production capacity. However, the current allocation of funds is heavily backloaded, with only $137 million designated for 2025-26 and $7.7 billion scheduled beyond 2030 (Department of National Defence, 2024). This delayed spending approach is inadequate, given Canada's munitions shortage, which stems from both long-term underinvestment and recent depletion of strategic reserves due to the provision of military aid to Ukraine. The urgency of this issue is underscored by Canada's former Chief of the Defence Staff Wayne Eyre, who confirmed before a parliamentary committee that Canada's munitions stocks would last mere days in a wartime scenario (Brewster, 2023).

To address this critical shortfall, Canada should turn to the domestic munitions manufacturers that are capable of scaling up production to increase strategic reserves. That said, these firms are unlikely to invest in increased output without clear contractual commitments from the federal government, and some contractors require direct government support to expand their production capabilities. Addressing this challenge requires not only immediate investment to increase the supply of existing munitions, but also a forward-looking strategy to develop next-generation ammunition essential to the Canadian Army. This includes the production of M1128 shells, which will be used with the howitzers Canada is procuring through the Indirect Fires Modernization (IFM) initiative.

To ensure Canada's munitions supply meets operational needs, the Department of National Defence should *accelerate spending on munitions procurement and allocate at least $2 billion of the planned $9.5 billion by 2027*. This funding should be directed towards key initiatives, including the expansion of IMT's production capacity for M795 and M1128 shells, investment in GT-ODS-C's ability to load, assemble, and pack 155mm shells and produce MACS propelling charges, and the awarding of multi-year or Indefinite Delivery, Indefinite Quantity (IDIQ) contracts to guarantee consistent annual ammunition orders. Taking these steps will ensure that Canada can rapidly rebuild its munitions stockpiles, support ongoing military commitments, and enhance national readiness in the face of emerging security challenges.

Part C: Prioritize the Army's Indirect Fires Modernization

The Government of Canada has recently initiated the Army's Indirect Fires Modernization (IFM) program, which aims to replace the current fleet of towed howitzers with a greater number of self-propelled howitzers, while also procuring additional towed artillery. The final Request for Information (RFI) outlines the acquisition of 80 to 98 new 155mm self-propelled howitzers, up to 99 120mm mortar systems, and up to 85 81mm mortar systems. Notably, no cost estimates for this initiative were provided in *Strong, Secure, Engaged* or *Our North, Strong and Free*, meaning that any spending on IFM will be entirely new and exceed previously forecasted defence expenditures.

The RFI for the IFM program imposes strict technical requirements that significantly narrow the pool of eligible systems before the bidding process even begins. One such requirement, the ability to fire while on the move, effectively limits the competition to a single viable option: the KNDS RCH 155 Artillery Gun Module (Badhwar, 2025). International interest in the RCH 155 has grown, with Germany committing to deliver units to Ukraine and the United Kingdom considering a procurement with a potential value of over $3 billion. Based on Germany's purchase, the unit cost of the RCH 155

is approximately $12 million, implying a total Canadian procurement cost of between $960 million and $1.2 billion for the self-propelled howitzers alone. This estimate does not account for the additional 120mm and 81mm mortar systems, which were added to the scope of IFM initiative more recently. The RFI does not provide detailed specifications for these mortar systems, making precise cost projections difficult. However, given the scale of procurement, *the total cost for these systems is expected to reach or exceed $250 million.*

Given the strategic importance of modernizing Canada's indirect fire capabilities, the Government of Canada should *prioritize the IFM procurement process and aim to secure partial delivery of the howitzers by 2028*. Ensuring timely acquisition and integration of these systems will be critical in enhancing the operational effectiveness of the Canadian Army and maintaining alignment with allied artillery modernization efforts.

Part D: Increase Salaries of CAF members

The CAF is facing a significant recruitment and retention crisis, with a shortfall of more than 13,600 personnel across both the regular and reserve forces (Burke, 2025). While adjustments to eligibility requirements are being introduced to address recruitment challenges, these measures alone may not be sufficient to improve personnel levels and operational readiness in a timely manner. A more direct and effective approach would be to increase pay rates for both new recruits and existing CAF members. This policy would not only enhance recruitment and retention efforts but also contribute to increased defence spending, a key objective in aligning Canada's military expenditures with those of its allies.

Increasing salaries of CAF members would also assist in the CAF's diversity, equity, and inclusion (DEI) efforts by providing better resources to women, people of colour, and those with disabilities. Given the CAF's low recruitment numbers in these key equity groups, a salary increase would provide better encouragement for those that face additional barriers to enlisting compared to the CAF's current member base.

As of January 15, 2025, the CAF had 64,595 regular force members and 23,117 reservists (Burke, 2025). Historical salary data provides a useful basis for estimating the financial impact of a pay increase. A 2017 report on reserve salaries indicated an average annual pay of $31,105 (Department of National Defence, 2017). When adjusted for inflation, this figure rises to approximately $37,680 in 2025. A 10% salary increase would therefore equate to an additional $3,768 per reservist, resulting in a total additional cost of approximately $85 million per year.

For regular force members, precise salary data is not readily available, but a conservative estimate based on rank and pay scales suggests an average salary of approximately $70,000. A 10% increase would amount to an additional $7,000 per member, leading to an annual additional cost of approximately $452 million for the entire regular force. When combined with the estimated increase for reservists, *the total additional expenditure required to implement a 10% salary increase across the CAF would be approximately $537 million per year.*

Given the urgency of CAF's personnel shortages and the need for increased defence spending, the Government of Canada *should implement a forces-wide salary increase of 10% for all regular and reserve members.* This measure would provide a necessary financial incentive to attract and retain personnel while ensuring that Canadian defence spending is more closely aligned with that of key allies.

Part E. Address the CAF Housing Shortage

CAF is currently facing a critical shortfall of 6,700 residential housing units for its members. Despite the pressing need for more housing, only 38 units have been constructed in the past two years. Annex A of the Defence Policy Update (DPU) outlines an investment of $295 million for housing, but this funding is minimal, with no allocation for the first two fiscal years and only $7 million earmarked from 2026-2027 to 2028-2029 (Department of National Defence, 2024). Based on the government's own projections for military housing, this limited funding results in only $44,000 available per residential unit - an amount that is insufficient to meet the required housing needs (Standing Committee on National Defence, 2024a). Recently, Defence Minister Bill Blair announced plans to construct 668 new housing units, but only 36 units are expected to be built this year (Brewster, 2025a).

This chronic shortage of residential housing for CAF members not only reflects poorly on the state of Canada's armed forces, but it also exacerbates the ongoing recruitment and retention crisis explored above. The inadequate availability of housing is a deterrent to potential recruits and contributes to the difficulties in retaining existing personnel. Furthermore, it represents a significant missed opportunity for expanded government spending that could have long-term benefits for both the CAF and the broader Canadian economy.

To address the current shortfall, DND *should create a dedicated CAF housing fund with an investment of $1 billion over the next four years to reduce the current housing shortage by at least 50%.* Allocating $1b to the construction of the 3,350 units required yields a potential spend of $298,507 per unit, which should be used to construct a variety of housing solutions, including townhouses and multi-unit apartment buildings.

In addition to the financial investment, overseeing the construction, maintenance, and allocation of these new housing units will require significant expansion within the Canadian Forces Housing Authority (CFHA). Currently a relatively small agency with around 300 staff, the CFHA will need to increase its capacity in order to effectively manage the growth in housing stock and match units with CAF members (Standing Committee on National Defence, 2024a). Therefore, DND *should increase funding and hire additional staff for the CFHA to ensure that the agency has the necessary resources to oversee this important infrastructure project.* The expansion of the CFHA would not only address the housing shortage but also contribute to the overall effectiveness and efficiency of CAF housing operations.

Part F: Upgrade on-base Infrastructure

Infrastructure on CAF bases, including hangars, depots, and other critical facilities, is in increasingly poor condition and much of it is in urgent need of upgrades. DND currently values its real property portfolio at $28 billion. However, only 59.8% of DND infrastructure is classified as being in "suitable" condition - a decline from 64.4% in 2021-22 (Department of National Defence, 2024a). According to DND, this is "primarily due to resource constraints and lack of budget/investments" (Department of National Defence, 2024a).

The infrastructure deficit persists despite DND allocating $4.9 billion in spending under the category of "Sustainable Bases, Information Technology Systems and Infrastructure," in 2023-2024, including $868 million for the construction, recapitalization, and investment in key defence infrastructure assets (Treasury Board Secretariat, 2024). Due to substantial funding shortfalls, a growing backlog of deferred maintenance, and rising costs, DND has noted that maintenance expenses have grown exponentially higher, limiting its ability to invest in necessary repairs and

upgrades. If left unaddressed, the ongoing decline of DND infrastructure could directly impact CAF operations by reducing the effectiveness and readiness of military facilities.
To address this issue, DND *should spend an extra $1B per year on Sustainable Bases, Information Technology Systems and Infrastructure.* At least $500 million of this increased funding should be specifically allocated to infrastructure construction and recapitalization to prevent further degradation of critical military facilities and ensure that CAF operations remain fully supported.

Part G: Strategic Partnerships to Support Modernization

Achieving the modernization goals outlined in this policy framework will require more than fiscal commitments. Strategic partnerships, both international and domestic, will be essential to ensuring that Canada's investments in capital-intensive equipment, technological innovation, and personnel infrastructure yield maximum operational impact. As Canada accelerates its procurement of conventionally powered submarines, integrated air and missile defence systems, and munitions production capacity, the DND must pursue a whole-of-society approach that leverages the expertise, capacity, and innovation of trusted allies, industry leaders, academic institutions, and emerging technology firms.

International collaboration will be especially critical in advancing major procurement projects such as the Canadian Patrol Submarine Project (CPSP), which is projected to cost up to $60 billion. South Korea's Hanwha Ocean offers the KSS-III, which is currently the only in-service submarine platform that meets Canadian operational and environmental specifications (Saballa, 2025). Partnering with Hanwha would support the accelerated timelines outlined in Part A, while also opening opportunities for local assembly and knowledge transfer. Additional submarine suppliers, such as France's Naval Group and Sweden's Saab Kockums, may also offer viable options for co-production, depending on Canada's final design requirements.

Canada's vulnerability in air and missile defence necessitates a similarly strategic and collaborative approach. The acquisition of proven systems, such as the Patriot or THAAD missile systems from the United States, Iron Dome and David's Sling from Israel, or European solutions from MBDA, Rheinmetall, and Thales would allow Canada to deploy a robust, multi-layered air defense architecture while ensuring compatibility with NATO allies. These collaborations should not be viewed as transactional procurements, but rather as opportunities to embed Canadian procurement within joint training, logistics, and operational frameworks that enable seamless Allied cooperation. Joint procurement agreements, as demonstrated by NATO's Strategic Airlift Capability and the Eurofighter Typhoon program, should serve as reference points for future collaborative models.

Domestically, partnerships with Canada's defence industrial base are necessary to ensure sustained procurement, rapid delivery, and sovereign defense capabilities. Munitions producers such as General Dynamics Ordnance and Tactical Systems (GD-OTS) and IMT possess the technical expertise and facilities required to ramp up the production of key ammunition types, including 155mm M795 and M1128 shells, as outlined in Part B. The successful implementation of the Indirect Fires Modernization initiative in Part C similarly depends on a healthy and capable domestic supply chain. In the naval sector, shipbuilders such as Irving Shipbuilding in Halifax and Seaspan Shipyards in Vancouver are well positioned to contribute to submarine production and naval modernization efforts under the CPSP. Similarly, companies like L3Harris Canada, General Dynamics Canada, and MDA Space are vital to the development of radar, command-and-control systems, and aerospace components required to support modern weapons platforms. The Government of Canada *should use sole-source contracting tools such as the National Security Exception (NSE) to award contracts where domestic capacity*

exists, particularly when time-sensitive delivery and economic security are at stake (Office of the Procurement Ombudsman, 2022).

In addition to industry, Canada's leading research universities and R&D institutions must be engaged to support innovation in AI, cybersecurity, cold-weather infrastructure, and autonomous defence systems. The University of Toronto's Institute for Aerospace Studies (UTIAS) is a global leader in autonomous navigation and flight systems and could directly contribute to AI-enabled submarine guidance and predictive maintenance technologies. Carleton University's Centre for Security, Intelligence and Defence Studies (CSIDS) provides valuable policy expertise on cyber defense, NATO operations, and the Arctic security environment. Ontario Tech University's ACE Climatic Wind Tunnel is an internationally recognized facility for testing vehicles and sensors under extreme conditions, with potential applications for missile defense, Arctic patrol vehicles, and drone endurance simulations. These institutions *should be integrated into defence procurement frameworks through competitive research grants, challenge-driven innovation calls, and long-term knowledge exchange agreements that align research outcomes with DND's capability priorities.*

Finally, emerging defence technology firms will play an increasingly important role in future-proofing Canadian defence capabilities. New players such as Palantir Canada provide advanced battlefield analytics platforms that enhance real-time situational awareness and logistics management, key enablers for both the Indirect Fires Modernization program and submarine fleet operations. Sanctuary AI, a Vancouver-based company focused on autonomous robotics, could contribute to unmanned logistics and perimeter surveillance in remote base settings. D-Wave Systems, one of the world's pioneers in quantum computing, offers potential applications for encrypted military communication and computational modeling for surveillance, missile tracking, and cyber defence. Kongsberg Geospatial, a specialist in real-time mapping and geospatial analysis, provides tools for radar integration and air defence. These firms can be brought into the fold through procurement-linked innovation funds, dual-use technology accelerators, and small-value testing contracts that allow DND to validate emerging capabilities in operational environments.

To coordinate these multi-level engagements, the Government of Canada should *establish a Defence Partnerships Task Force, with a mandate to oversee the integration of international co-procurement arrangements, domestic industrial development, university collaboration, and emerging tech engagement.* This Task Force should report directly to the Minister of National Defence and work alongside the centralized procurement authority proposed under Pillar 2 to ensure alignment across capital projects. A partnership-driven approach to modernization will not only strengthen Canada's force readiness but also enhance the resilience, innovation, and credibility of its broader defence ecosystem. ■

Pillar 4: Addressing Emerging Threats

Part A: Establish a Top Secret Cloud Service

Many of Canada's allies, including all three members of the AUKUS trilateral partnership, have partnered with private corporations to develop top-secret cloud services to manage and exchange highly classified defence, national security, and intelligence data (Brewster, 2024). Establishing such infrastructure is becoming critical, as Canada's lack of a secure, cloud-based system could hinder its ability to fully integrate with Allied military platforms and intelligence-sharing agreements.

If Canada does not develop top secret cloud service rapidly, existing outdated digital infrastructure could negatively impact the effectiveness of military hardware that DND plans to procure, including F-35 stealth fighters, MQ-9 Reaper drones, and P-8 Poseidon surveillance aircraft. Furthermore, this technological gap places Canada at a disadvantage in negotiations to join Pillar 2 of AUKUS.

Recognizing the strategic importance of such a system, Australia recently awarded Amazon Web Services (AWS) a contract worth $2 billion AUD ($1.72 billion CAD) to develop three data centers for a top-secret cloud service, expected to be operational by 2027. *A similar investment of $1.5-2 billion in Canada* would modernize the country's defence infrastructure, support interoperability with key allies, and strengthen its position in future security partnerships.

To protect and manage important national security data and enhance partnerships with key allies, DND should *award a contract to AWS for the development of a top-secret cloud service for Canadian defence and intelligence data*, with the goal of achieving operational capacity by 2028. By investing in this capability, Canada can reinforce its strategic partnerships, bolster its defence posture, and demonstrate its commitment to collective security in an increasingly uncertain global landscape.

Part B: Build Domestic Rocket Launch Capacity

Canada is one of the few space-capable nations without a domestic rocket launch site, relying instead on U.S. launch facilities to place its satellites into orbit (Pugliese, 2025). Establishing domestic launch capability would reduce Canada's dependence on foreign infrastructure, provide greater flexibility for launching national security and communications satellites, and potentially lower launch costs over time. Historically, Canada did maintain such a capability through the Churchill Rocket Research Range in Manitoba, but this site was decommissioned in the 1980s amidst budget cuts and shifting policy priorities (Taylor, 2003).

DND has several options to regain this strategic capability, the first of which is constructing a government-owned launch facility dedicated to supporting the deployment of Canadian satellites. Churchill, Manitoba presents a viable option for this initiative due to its historical role in Canadian

rocketry, existing rail and port infrastructure, and strategic location in the High North. Establishing a DND or CAF presence at this site would also align with broader efforts to enhance Canada's Arctic security posture, which will be further explored later in this report.

Alternatively, a private-sector partnership presents a more immediate and cost-effective option. Maritime Launch Services (MLS), a Canadian company, is currently developing Canada's first spaceport near Canso, Nova Scotia and aiming to conduct its first orbital launch by 2026 (Pugliese, 2025). Expanding domestic launch capabilities on Canada's east coast would not only provide access to key orbits of interest to both Canadian and U.S. space operations but could bolster Canada's international presence in the space community by offering launch services to allied nations. The Government of Canada has already demonstrated interest in supporting MLS, having provided a $120,000 repayable contribution to the company to install specialized tracking and communications equipment at its facility (Pugliese, 2025).

The Department of National Defence *should consider options for securing domestic launch capability for Canadian satellites*. These options should include the construction of a wholly government-owned launch site in Churchill, as well as a partnership with Maritime Launch Services to ensure timely construction and future government access to the planned spaceport in Nova Scotia. While cost estimates of the MLS project have varied, a DND initiative to secure domestic launch capacity *could lead to an additional $250M in defence spending throughout the course of construction*. Securing domestic launch capacity is essential for safeguarding Canadian sovereignty, maintaining a competitive edge in the rapidly expanding space industry, and ensuring the timely deployment of critical defence technologies.

Part C. Build and launch space-based surveillance capability

Canada's current satellite infrastructure is limited, with its most significant assets being RADARSAT-2 and the more recent RADARSAT Constellation. RADARSAT-2, a single geocentric satellite, provides Earth monitoring and surveillance services used by the Department of National Defence and other organizations (Royal Canadian Air Force, 2020). For example, in response to Russia's invasion of Ukraine, Canada agreed to supply satellite data from RADARSAT-2 to support Ukrainian defence efforts (Pugliese, 2022). The RADARSAT Constellation, consisting of three satellites, is designed for ecosystem monitoring, maritime surveillance, and disaster management.

However, these satellites are aging, and Canada faces a growing capability gap. In late 2022, the federal Auditor General warned that the RADARSAT Constellation could exceed its operational lifespan by 2026, while its intended replacement, the Defence Enhanced Surveillance from Space Project (DESSP), remains years away from deployment. Although Canada has allocated between $1 billion and $5 billion under NORAD modernization for DESSP, initial satellite delivery is not expected until beyond 2035, leaving a prolonged period without adequate surveillance capabilities. Meanwhile, private-sector initiatives, such as Telesat's planned global communication satellite network, demonstrate that military communication capabilities in the Arctic could be operational as a commercial service a decade sooner than the government's current plans (Brewster, 2024a).

Further, some of Canada's allies have taken decisive steps to expand their satellite infrastructure. The European Union's IRIS² project, a multi-orbit satellite internet constellation, was announced in 2022, awarded a contract in 2024, and is set to launch in 2027 - demonstrating an accelerated timeline of just five years (Diris, 2025). While IRIS² is a telecommunications, rather than military, surveillance project, its plan to rapidly build 264 satellites sets an example of what can be accomplished when national governments work with their domestic space industries. Robust satellite

infrastructure is essential for intelligence gathering, precision targeting, real-time situational awareness, and strategic decision-making in modern defence operations. As geopolitical tensions rise and military reliance on space-based assets increases, Canada must secure sovereign satellite capabilities to protect national security interests while reducing dependence on foreign partners.

To ensure Canada remains competitive in space-based defence and surveillance, DND *should engage with Canadian private-sector space companies and award a contract for DESSP by 2026*, with the first satellite launch targeted for 2028. Considering the cost of satellite constellations recently launched by allies, this project *would add between $3 billion and $5 billion in defence spending throughout the lifespan of the procurement process.* Investing in domestic satellite development will not only enhance Canada's defence and surveillance capabilities, but also strengthen the Canadian space industry, driving innovation and ensuring long-term economic and technological benefits.

Part D. Boost academic research, conferences, and civic engagement

A great opportunity for Canada to increase its defence spending while still investing in Canadians is to support its academic outreach. Currently, Canada operates the Mobilizing Insights in Defence and Security (MINDS) program to fund expert research projects, expert briefings, and collaborative research networks (Government of Canada, 2024). Programs such as these are great opportunities for the government to engage with academics. To improve the program, more investment is needed to expand its outreach to target students, early academics, and private sector professionals, rather than academic researchers. This will help decrease the innovation gap between China and Canada, which is widening each year due to China's increased research budget (Canadian Security Intelligence Service, 2018). By investing in younger and diverse Canadians, Canada can bolster its policy research and development, increase the CAF's recruitment, engage different demographics, and increase public discourse on defence spending.

Canada can become a leader in defence policy and research by increasing academic investment in policy areas where it has existing strengths. The Montreal Climate Change and Security Centre of Excellence (CCASCOE) is a great opportunity for Canada to increase its contributions to NATO and engage more with its allies. By providing further funding to this centre, Canada can solidify its role as a leader in climate policy. Areas for investment include a research partnership with the Canada High Arctic Research Station (CHARS) to further investigate the impact of climate change on Canada's arctic.

Other areas for increased investment and outreach include women-based organizations such as Women in International Security (WIIS), and Women in Defence and Security (WIDS). Engaging women through organizations such as these can increase discourse and support for increased defence spending amongst a demographic with historically low support (Angus Reid Institute, 2024). Additionally, it can assist in the CAF's diversity efforts and bring new perspectives in defence and security studies, traditionally dominated by white males. Areas for investment include the sponsorship of scholarships, women-only events, and women-focused research. ■

Pillar 5: Protecting Arctic Sovereignty

Part A: Establish CFB Iqaluit

Defence Minister Bill Blair has announced that Iqaluit will be one of the locations for the Department of National Defence's planned Northern Operational Support Hubs (NOSH). These hubs, which will consist of airstrips, logistics facilities, and equipment, are intended to strengthen CAF's ability to assert Canadian sovereignty and maintain a greater year-round presence in the Arctic (Thatcher, 2025). While the establishment of a Northern Operational Support Hub in Iqaluit is a positive step toward improving both CAF's regional presence and addressing infrastructure deficits in the North, it falls short of the level of capability required to serve as a credible deterrent to foreign actors seeking to exploit Canada's Arctic vulnerabilities.

One major limitation of the current NOSH plan is that the hubs will be "activated and deactivated as needed" to support CAF operations and those of other federal partners (Thatcher, 2025). This suggests that they will not house a permanent RCAF presence. Additionally, over 90% of the funding for the Northern Operational Support Hubs is back-loaded to after 2030, further delaying any meaningful impact on Arctic defence capabilities.

Expanding the scope of the Iqaluit support hub to establish a permanent military base would allow for the pre-positioning of key RCAF assets, including the incoming MQ-9B SkyGuardian remotely piloted aircraft for surveillance and reconnaissance (expected to enter service in 2028), search-and-rescue aircraft such as the CH-149 Cormorant helicopters and CC-295 Kingfisher planes, and a stronger permanent basing option for the F-35 fighter jets that will begin arriving in 2026 (Thatcher, 2025). Establishing a permanent drone presence in the Arctic would significantly enhance Canada's ability to conduct surveillance and intelligence-gathering operations while deterring foreign incursions into its high north.

The establishment of a military base in Iqaluit would also require investments in critical infrastructure, such as sewer and water treatment facilities, fibre optic networks, and road systems. These projects could foster increased collaboration with Inuit companies and be leveraged as dual-use infrastructure to support both military operations and the local population.

To ensure a sustained and effective military presence in the Arctic, DND *should revise its plan for the Northern Operational Support Hub in Iqaluit and instead establish Canadian Forces Base (CFB) Iqaluit* - a permanent military installation designed to support a continuous RCAF presence in Canada's Arctic. Throughout the planning and construction of CFB Iqaluit, DND *should engage with the Government of Nunavut and members of the Inuit community to ensure that the project benefits the residents of Iqaluit without jeopardizing their rights or unique way of life.* By upgrading the proposed Support Hub to a full-scale military base, DND will be able to address infrastructure deficits in the High North, while scaling up its military presence in the region.

Part B: Upgrade the Port of Iqaluit

Canada currently lacks a permanent naval base in the Arctic, which constitutes a significant gap in its ability to monitor and protect northern waters. The Nanisivik Naval Facility, which has been under construction for years, still has no confirmed opening date and leaves Canada without a reliable maritime presence in the region. Strengthening Arctic naval infrastructure is essential, as the area contains valuable critical minerals and the Northwest Passage is poised to become an increasingly important shipping route due to climate change. The growing interest of foreign states in Arctic resources, as well as ongoing challenges to Canada's sovereignty over the Northwest Passage - including from the United States - underscore the urgent need for an enhanced Royal Canadian Navy (RCN) presence.

However, even once operational, the Nanisivik Naval Facility will be of limited utility. It is a small refueling station with unheated fuel tanks, restricting its operations to the summer months. Plans to expand the facility into a deepwater port were scrapped due to cost concerns, further limiting its role in supporting a year-round naval presence (Pugliese, 2025a). The prolonged delays and seasonal limitations of Nanisivik mean it will not provide the necessary infrastructure to adequately support Arctic and Offshore Patrol Ships (AOPS) or the heavy icebreakers Canada is set to receive under the National Shipbuilding Strategy.

A more viable alternative for year-round naval operations is the newly opened Port of Iqaluit, a deepwater facility designed to support cargo shipments into northern communities. Although it is located further south than Nanisivik, it is fully operational and could be upgraded to accommodate RCN vessels. Enhancing the port's capabilities to support refueling and permanent stationing of AOPS vessels and other RCN ships would allow for a significantly improved permanent naval presence in the Arctic, and would be a massive improvement over existing RCN locations such as Halifax and Esquimalt.

To address this gap, DND *should collaborate with the Government of Nunavut to fund upgrades to the Port of Iqaluit to enable it to support heavy icebreakers, Harry DeWolf-class Arctic and Offshore Patrol Ships, and River-class destroyers*. The Canadian government committed approximately $64 million to the port project, and another investment of equal size would ensure that the port is capable of supporting naval vessels. This investment would provide the RCN with a strategic foothold in the Arctic, ensuring a more consistent and effective presence in the region to safeguard Canada's sovereignty and national security interests.

Part C: Establish Naval Presence at the Port of Churchill

The Port of Churchill in Manitoba is Canada's only Arctic deepwater seaport with rail access, offering strategic value for both commercial and defence purposes. Historically, the port supported Royal Canadian Navy (RCN) operations through CFS Churchill, a naval station that was decommissioned in 1968. In 2016, following the port's temporary closure, experts called for its revitalization as a naval facility to strengthen Canada's Arctic sovereignty (Gilmore, 2016; Griffiths, 2016). Since then, ownership has transferred to Arctic Gateway Group, a partnership of 41 First Nations and local communities that now operates the port, a marine tank farm, and the Hudson Bay Railway, which links Churchill to the national rail network (Canadian Press, 2025).
Recognizing the port's economic and strategic importance, the Governments of Canada and Manitoba have committed more than $79 million to infrastructure upgrades. While its private ownership may present challenges for direct military investment, partnering with Arctic Gateway Group offers an opportunity to enhance Arctic security while advancing Indigenous economic

reconciliation. Leveraging existing infrastructure would enable the port to support the Royal Canadian Navy's fleet, providing an alternative hub for Arctic operations beyond the Port of Iqaluit.

The Port of Churchill features four deep-sea berths that can accommodate vessels with a draft of up to 17 metres. However, its economic viability has been challenged by seasonal ice coverage during the winter months and competition from other cargo routes into Canada. These challenges create an opportunity for a mutually beneficial partnership. Stationing AOPS vessels and heavy icebreakers at the port would establish a year-round presence, enhancing its operational sustainability while strengthening Canada's Arctic security.

To enhance Canada's ability to project naval power and secure Arctic sovereignty, DND *should negotiate a long-term agreement with Arctic Gateway Group to ensure RCN access to port infrastructure.* Furthermore, targeted investments should be made to upgrade the port's capabilities, enabling it to support heavy icebreakers, Harry DeWolf-class Arctic and Offshore Patrol Ships (AOPS), and River-class destroyers. These measures would strengthen Canada's operational readiness in the Arctic while fostering economic development in northern and Indigenous communities.

Part D. Accelerate upgrades of Northern Forward Operating Locations

Canada is set to take possession of its first F-35 fighter jet in 2026, but the necessary upgrades to the Forward Operating Locations (FOLs) in the Arctic to accommodate F-35s year-round will not be completed until 2034 as part of the NORAD Northern Basing Infrastructure project. The current FOL in Inuvik, for instance, can barely support CF-18 fighters due to its short runway and is not operational year-round (Senate of Canada, 2022). At present, less than $20 million is allocated to upgrade these locations, with a final completion target set for 2039 (Department of National Defence, 2024b).

The required upgrades include runway extensions, new hangars, and additional infrastructure to ensure the sites can support year-round operations. Accelerating these upgrades would require a significant increase in labour and materials in the high north, presenting a valuable opportunity to create local jobs and engage with Inuit communities and companies in the process.

To address these delays, DND *should allocate an additional $50 million to the NORAD Northern Basing Infrastructure project.* Furthermore, the government *should aim to accelerate the Start Definition phase from 2027/28 to 2025/26* and bring forward the Start Implementation phase from 2030/31 to 2028/29.

Part E: Accelerate planned purchase of Long Range Air-to-Air Missiles.

As part of its efforts to modernize air weapons under NORAD modernization, Canada has committed $6.38 billion to the procurement of long, medium, and short-range air-to-air missiles. These munitions will be critical to supporting the operations of both the RCAF's existing CF-18 fighter jets and the incoming fleet of F-35s which will be used for defence and deterrence in the Canadian Arctic. While infrastructure and technological upgrades are necessary to accommodate the F-35, securing a sufficient stockpile of air-to-air missiles is equally essential to ensure operational readiness in potential wartime scenarios.

Given Canada's existing shortages in its munitions stockpile, future procurements must mitigate the risk of future shortages through proactive planning for sufficient capacity. Current plans include the full delivery of short-range AIM-9X Sidewinder missiles by 2029/30 and medium-range AIM-120-D3 Advanced Medium-Range Air-to-Air Missiles (AMRAAM) by 2031/32. However, the

most costly and strategically significant component—the long-range missile procurement, valued at up to $5 billion—has yet to enter even its options analysis phase, with the definition phase not scheduled to begin until 2026 (Department of National Defence, 2023a). Delays in this process could leave Canada's fighter fleet vulnerable, particularly as peer and near-peer adversaries continue to enhance their own long-range missile capabilities.

To increase defence spending quickly and address these potential shortcomings, DND *should increase order quantities of both the AIM-9X Sidewinder and AIM-120-D3 AMRAAM*. These procurement projects are currently valued at $250-499 million and $500 million-$1 billion, respectively, and increasing order quantities could add up to $250 million to defence spending by 2032. Additionally, to ensure Canada does not fall behind in securing long-range air-to-air missile capability, DND *should immediately initiate a Request for Information (RFI) and prioritize contracting a supplier capable of delivering an initial shipment by 2027/28*. Aligning the long-range missile procurement timeline with that of the short- and medium-range systems will ensure a balanced and effective air combat capability for the RCAF's fighter fleet. ■

Concluding Remarks

The research presented identifies many opportunities for Canada to increase its defence spending in a fiscally responsible manner by being comparable to that of NATO allies, diversified, and streamlined. As demonstrated by Germany, Denmark, and the Netherlands, Canada can rapidly increase its defence expenditure to meet NATO's spending targets while still maintaining public support and fiscal responsibility. By committing to the proposed four-pillar plan outlined in this proposal, Canada can aim to meet its NATO commitments and strengthen its role as a leader within the alliance, while also boosting domestic capabilities for the long term.

The dire need for modernization in the CAF presents opportunities for strategic investments to strengthen Canada's physical security, while ensuring the wellbeing of our armed forces. It is evident that upgrades are needed to Canada's submarine fleet, munitions, artillery, and base infrastructure. The need for further investment in these key areas is not a new objective, as the Department of Defence (DND) has seen increased investment to address these deficiencies. However, the issue of slow bureaucratic processes and policies prevents DND from using this money wholly and efficiently, resulting in billions of dollars of lapsed funding. To ensure that our military's budget is being used effectively, large-scale changes need to be made to the procurement process to ensure efficiency and effectiveness in the long-term. Temporarily, procurement should be consolidated under the Minister of Defence to address these concerns in a timely manner.

With emerging threats such as cyber security, space-based surveillance, rocket launching, and academic gaps with China, Canada needs to diversify its defence spending to ensure it is well-prepared in the face of grey-zone warfare. The movement away from a traditional understanding of security and the increase in grey zone threats suggests that Canada needs to look toward other avenues for defence spending, beyond physical security within the CAF.

By focusing on Canada's uniqueness and strengths, defence capabilities can be reaffirmed as leading amongst NATO nations. The Arctic is a key area where Canada holds a large land mass, academic insight, and various opportunities. By establishing and expanding Canada's Arctic bases, while encouraging further academic research and dialogue with Indigenous communities, Canada can strengthen its position as a leading Arctic nation.

Given the need for modernization, emerging threats, and global uncertainty, Canada must focus on its defence capabilities in the long-term. Further, Canada must begin to take these security and defence autonomously, given reevaluations of the US-Canada relationship. By meeting the 2% guideline and 20% equipment benchmark agreed upon by NATO member states, Canada will not only reaffirm its commitment and leadership within the alliance, but improve and strengthen its domestic capabilities for the better. ■

References

Andzans, M. (2023, July 13). *Latvia Applauds the Return to Conscription*. CEPA. https://cepa.org/article/latvia-applauds-the-return-to-conscription/

Angus Reid Institute. (2024). *As NATO calls on allies to increase defence spending, Canadians prioritise importance of military readiness*. [Data set]. https://angusreid.org/wp-content/uploads/2024/03/2024.03.05_NATO.pdf

AP News. (2024, July 2). *Survey finds popular support for NATO at a challenging time for the Western alliance*. AP News. https://apnews.com/article/nato-pew-survey-poland-us-0c685c2fb94e91786e344a00331025fc

Badhwar, C. (2025). *Canadian Army's artillery modernization plan takes shape*. Defense Archives. https://defensearchives.com/news/canadian-armys-artillery-modernization-plan-takes-shape/

Baird Maritime. (2025, February 18). *Danish defence procurement agency selects new anti-ship missile*. Baird Maritime / Work Boat World. https://www.bairdmaritime.com/security/weaponry/danish-defence-procurement-agency-selects-new-anti-ship-missile

BBC News. (2022, June 1). Denmark votes to drop EU defence opt-out in "historic" referendum. *BBC News*. https://www.bbc.com/news/world-europe-61644663

Blazina, C. (2020, November 30). *NATO seen in a positive light by many across 10 member states*. Pew Research Center. https://www.pewresearch.org/short-reads/2020/11/30/nato-seen-in-a-positive-light-by-many-across-10-member-states/

Brewster, M. (2023). *Top generals warn that allies — Canada included — are running dangerously low on artillery shells*. CBC News. https://www.cbc.ca/news/politics/canadian-armed-forces-artillery-shells-nato-ukraine-wayne-eyre-1.6988281

Brewster, M. (2024). *Canada ponders 'top secret' data cloud as allies push ahead with intelligence-sharing plans.* CBC News. https://www.cbc.ca/news/politics/data-cloud-aukus-canada-united-states-australia-1.7341555

Brewster, M. (2024a). *Canadian military should turn to private sector for space surveillance tech, MPs told.* CBC News. https://www.cbc.ca/news/politics/radarsat-constellation-satellites-military-mda-1.7195713

Brewster, M. (2025). *Liberals revive campaign pitch for centralized military procurement agency.* CBC News. https://www.cbc.ca/news/politics/liberals-pitch-procurement-agency-1.7509906

Brewster, M. (2025a). *Internal DND documents show only 5% of planned military housing to be built this year.* CBC News. https://www.cbc.ca/news/politics/defence-department-new-military-housing-1.7446627

Bricker, D. (2023, August 4). *More Than Half (56%) of Canadians Consider Canada's Armed Forces to be Old and Antiquated.* Ipsos. https://www.ipsos.com/en-ca/half-of-canadians-consider-armed-forces-antiquated

Bundesregierung. (2024). *NATIONAL SECURITY AND DEFENCE INDUSTRY STRATEGY.* https://www.bmvg.de/resource/blob/5873628/138fddf8112609dfdc3ea44a52ba9195/dl-national-security-and-defence-industry-strategy-data.pdf

Burke, A. (2025). *Military now accepting recruits with asthma, ADHD and other conditions amid staffing shortage.* CBC News. https://www.cbc.ca/news/politics/military-recruitment-medical-screening-process-change-1.7465456

Cameron, I. (2024, October 9). *Germany has committed to improving its defense. Its budget needs to reflect this.* Atlantic Council. https://www.atlanticcouncil.org/blogs/new-atlanticist/germany-has-committed-to-improving-its-defense-its-budget-needs-to-reflect-this/

Canadian Press. (2025). *Province, federal government team up to spend nearly $80 million on Churchill Port.* CBC News. https://www.cbc.ca/news/canada/manitoba/province-feds-spend-churchill-port-1.7450679

Canadian Security Intelligence Service. (2018). China and the age of strategic rivalry. https://www.canada.ca/content/dam/csis-scrs/documents/publications/CSIS-Academic-Outreach-China-report-May-2018-en.pdf

Collins, J. (2019, December). *Defence Procurement Canada: Opportunities and Constraints.* Canadian Global Affairs Institute. https://www.cgai.ca/defence_procurement_canada_opportunities_and_constraints

Department of National Defence (2017). *Review of Military Reserve Payroll.* https://www.canada.ca/content/dam/dnd-mdn/migration/assets/FORCES_Internet/docs/en/about-reports-pubs-audit-eval/281p1259-3-005-eng.pdf

Defense Mirror. (2025). *Denmark Plans Urgent Procurement of Ground-based Air Defence Systems.* Defensemirror.com. https://www.defensemirror.com/news/39158

Department of National Defence (DND). (2014). *Operation REASSURANCE - Canada.ca.* Canada.ca. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html

Department of National Defence (2024b). NORAD Northern Basing Infrastructure. https://apps.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=2305

Department of National Defence. (2023a). *Long Range Air-to-Air Missile.* https://apps.forces.gc.ca/en/defence-capabilities-blueprint/project-details.asp?id=1350

Department of National Defence. (2024). Our North Strong and Free: A Renewed Vision for Canada's Defence. https://www.canada.ca/en/department-national-defence/corporate/reports-publications/north-strong-free-2024.html

Department of National Defence. (2024a). *Departmental Results Report.* https://www.canada.ca/en/department-national-defence/corporate/reports-publications/departmental-results-report/2023-24-index.html

Diris, J. (2025). *IRIS2: everything you need to know about this new European constellation.* Polytechnique Insights. https://www.polytechnique-insights.com/en/columns/industry/iris2-everything-you-need-to-know-about-this-new-european-constellation/

Government of Canada. (2024, December 10). *Mobilizing insights in defence and security.* https://www.canada.ca/en/department-national-defence/programs/minds.html

Gilmore, S. (2016). *How Ottawa abandoned our only Arctic port. Maclean's.* https://macleans.ca/news/canada/abondoned-churchill/

Griffiths, J. (2016). *OP-ED | Revive Port of Churchill as navy base to assert Arctic sovereignty.* Canada West Foundation. https://cwf.ca/research/publications/revive-port-of-churchill-as-navy-base-to-assert-arctic-sovereignty/

International Republican Institute (IRI). (2020). *Public Opinion Poll: Latvia.* https://www.iri.org/wp-content/uploads/2020/07/latvia_slide_deck_ltvto_be_published_0.pdf

Library of Parliament (2020). *Defence Procurement Organizations Worldwide: A Comparison.* https://lop.parl.ca/staticfiles/PublicWebsite/Home/ResearchPublications/BackgroundPapers/PDF/2019-52-e.pdf

Luck, A. (2024). *Germany Approves Budget For Additional Four Type 212CD Submarines*. Naval News. https://www.navalnews.com/naval-news/2024/12/germany-approves-additional-four-type-212cd-submarines/

Ministry of Defence (MoD) of Denmark. (2024). *Danish Defence expenditures 2024*. https://www.fmn.dk/globalassets/fmn/dokumenter/aarsrapporter/-2024-danish-defence-expenditures-.pdf

Ministry of Defence (MoD) of Ukraine. (2025, January 9). *"Danish Model" of support for Ukraine's defense industry | MoD News*. Mod.gov.ua. https://mod.gov.ua/en/news/results-of-the-danish-model-of-support-for-ukraine-s-defense-industry-in-2024-the-armed-forces-of-ukraine-received-weapons-valued-at-nearly-538-million

MoD of Latvia. (2024). *Defence budget*. Aizsardzības Ministrija. https://www.mod.gov.lv/en/about-us/defence-budget

MoD of the Netherlands. (2024). *Defence White Paper 2024: Strong, smart, together*. Defensie.nl. https://english.defensie.nl/latest/news/2024/09/05/defence-white-paper-2024-strong-smart-together

NATO. (2014). *Wales Summit Declaration*. https://www.nato.int/cps/en/natohq/official_texts_112964.htm

NATO. (2021). *Defence Expenditure of NATO Countries (2014-2021)*. https://www.nato.int/nato_static_fl2014/assets/pdf/2022/3/pdf/220331-def-exp-2021-en.pdf

NATO. (2024). *Defence Expenditure of NATO Countries (2014-2024)*. https://www.nato.int/nato_static_fl2014/assets/pdf/2024/6/pdf/240617-def-exp-2024-en.pdf

NATO. (2025, April 3). *Defence expenditures and NATO's 2% guideline.* https://www.nato.int/cps/en/natohq/topics_49198.htm

NL Times. (2025, March 12). *Support for expanding Dutch defense industry grows amid rising global tensions*. NL Times. https://nltimes.nl/2025/03/12/support-expanding-dutch-defense-industry-grows-amid-rising-global-tensions

Office of the Parliamentary Budget Officer (2024). *The Fiscal Implications of Meeting the NATO Military Spending Target.* https://www.pbo-dpb.ca/en/publications/RP-2425-020-S--fiscal-implications-meeting-nato-military-spending-target--repercussions-financieres-atteinte-cible-depenses-militaires-fixee-otan

Politico. (2025a). *POLITICO Poll of Polls — Dutch polls, trends and election news for the Netherlands*. POLITICO. https://www.politico.eu/europe-poll-of-polls/netherlands/

Politico. (2025b). *POLITICO Poll of Polls — Latvian polls, trends and election news for Latvia.* POLITICO. https://www.politico.eu/europe-poll-of-polls/latvia/

PolitPro. (2025, April 18). *Denmark: Polls and trends for the :year election*. Denmark: Polls and Trends for the 2026 Election. https://politpro.eu/en/denmark

Psaledakis, D., & Pamuk, H. (2024, July 10). F-16 jets being sent to Ukraine from Denmark and the Netherlands, Blinken says. *Reuters*. https://www.reuters.com/world/f-16-jets-being-sent-ukraine-denmark-netherlands-blinken-says-2024-07-10/

Pugliese, D. (2022). *Canada answers Ukraine's call for satellite radar imagery*. SpaceNews. https://spacenews.com/canada-answers-ukraines-call-for-satellite-radar-imagery/

Pugliese, D. (2025). *New rocket site could reduce Canada's dependence on U.S. launches.* Ottawa Citizen. https://ottawacitizen.com/news/national/defence-watch/rocket-launch-nova-scotia-united-states-canada

Pugliese, D. (2025a). *Opening of Arctic naval refuelling facility in limbo, DND acknowledges.* Ottawa Citizen. https://ottawacitizen.com/news/national/defence-watch/opening-arctic-naval-refueling-facility-limbo

Reuters. (2024a, March 21). *Lithuania pledges to spend at least 3% of GDP on defence.* Reuters. https://www.reuters.com/world/europe/lithuania-pledges-spend-least-3-gdp-defence-2024-03-21/

Reuters. (2024b, June 11). *Dutch intelligence says Chinese cyber espionage goes wider than it suspected.* Reuters. https://www.reuters.com/technology/cybersecurity/dutch-intelligence-says-chinese-cyber-espionage-goes-wider-than-it-suspected-2024-06-11/

Reuters. (2024c, September 5). *Netherlands hikes defence spending to face new threats.* Reuters. https://www.reuters.com/world/europe/netherlands-hikes-defence-spending-meet-nato-goal-2024-09-05/

Royal Canadian Air Force (2020). *Space capabilities.* https://www.canada.ca/en/air-force/corporate/space/capabilities.html

Senate of Canada. (2022). *Defending the North: The Arctic's strategic role and importance.* SenCA+ Magazine. https://sencanada.ca/en/sencaplus/news/defending-the-north-the-arctic-s-strategic-role-and-importance/#:~:text=A%20CF%2D18%20sits%20in,the%20Northwest%20Territories%20in%20Yellowknife.

Shimooka, R. (2024). *Three things Canada can do to meet its NATO defence spending commitment within three years.* The Hub. https://thehub.ca/2024/12/03/richard-shimooka-three-things-canada-can-do-to-meet-its-nato-defence-spending-commitment-within-three-years/

Standing Committee on National Defence (2024). *A Time for Change: Reforming Defence Procurement in Canada.*

https://www.ourcommons.ca/Content/Committee/441/NDDN/Reports/RP13203590/nddnrp12/nddnrp12-e.pdf

Standing Committee on National Defence. (2024a). *Gaps to Fill: Housing and Other Needed Supports for Canadian Armed Forces Members and their Families.* https://www.ourcommons.ca/Content/Committee/441/NDDN/Reports/RP13346049/nddnrp14/nddnrp14-e.pdf

Taylor, C.J. (2003). *Exploring Northern Skies: The Churchill Research Range*. Manitoba Historical Society. https://www.mhs.mb.ca/docs/mb_history/44/exploringnorthernskies.shtml

Thatcher, C. (2025). *Should more RCAF aircraft be pre-positioned with new northern operational support hubs?*. Skies Magazine. https://skiesmag.com/news/should-more-rcaf-aircraft-be-pre-positioned-with-new-northern-operational-support-hubs/

Treasury Board Secretariat. (2024). *Infographic for Defence Infrastructure Construction, Recapitalization and Investment.* Government of Canada. https://www.tbs-sct.canada.ca/ems-sgd/edb-bdd/index-eng.html#infographic/program/ND-BUS02/financial

ZOIS - Zentrum für Osteuropa- und internationale Studien. (2024). *The War in Ukraine and Latvia's Russian-speaking Community*. Zois-Berlin.de. https://www.zois-berlin.de/en/publications/zois-spotlight/the-war-in-ukraine-and-latvias-russian-speaking-community

The NATO Association of Canada