



# Modernizing NORAD cannot occur in a vacuum

Understanding the dependencies and opportunities among various federal policies

By Grant McDonald and Dan Doran



Our previous column pointed out the urgency to modernize the North American Aerospace Defence (NORAD) Command amid advancements in technology, Cold War 2.0, and the increasing focus from foreign entities to lay claim to the mineral riches in the Arctic that are essential to the success of clean energy transition.

This modernization effort cannot occur in a vacuum.

With most NORAD-related investments slated to take place in Northern and Arctic Canada<sup>i</sup>, it is essential to fully understand the interconnectivity between NORAD Modernization and other federal policies and strategies that impact the jurisdiction. These include the Arctic and Northern Policy Framework<sup>ii</sup>, the report on Arctic Security<sup>iii</sup>, Canada's Critical Minerals Strategy<sup>iv</sup>, the Truth and Reconciliation Committee's Calls to Action in addition to DND's Strong, Secure, Engaged and Greening Defence<sup>v</sup>. Connecting the dots (including the funding structures) among

these policies will be critically important to effectively streamline delivery of the intended outcomes.

The questions to be addressed are whether the policies are integrated well enough to support the government's objectives and, more importantly, do they benefit the Indigenous peoples who are directly impacted by them.

There are three areas that would benefit from further analysis: major project management, inclusive co-creation, and infrastructure.

## Major Project Management

Large and complex programs involving numerous stakeholders from distinct organizations, especially in government, often incur timeline delays and budget overruns.<sup>vi</sup> While there is no magic formula to eliminate these inherent risks, early and fully integrated program management remains the most proven approach to effective risk mitigation.

Canada has a clear opportunity here to coordinate these various programs actively and intentionally between departments and initiatives to streamline, integrate and avoid duplication of effort. This should result in a much higher probability of achieving effective outcomes, fewer delays, and cost overruns.

The first step is to create a program integration office dedicated to program alignment, prioritization and planning that includes leaders from each stakeholder group with skin in the game. In terms of NORAD Modernization, this would include the Department of National Defence, Innovation Science and Economic Development, Public Services and Procurement Canada, Natural Resources Canada, Indigenous and Northern Affairs Canada, Environment Canada, and Infrastructure Canada among others.

## Co-Creation

Past defence-related decisions sometimes resulted in harmful impacts such as the relocation of Indigenous communities and substantial environmental impacts and contamination. In the latter case, the Distant Early Warning (DEW) Line remediation project resulted in the costliest government environmental clean-up in Canadian history.<sup>vii</sup>

Inclusive co-creation is an approach where all parties, including local and Indigenous governments, work together to co-design, plan, and implement programs and initiatives. The benefit of this approach is that it is sustainable because it incorporates social, environmental, economic, and cultural opportunities and risks and will have a lasting impact within communities. Such a holistic approach integrates security imperatives with environmental stewardship and community engagement.

## Infrastructure

Arctic infrastructure – namely transportation, telecommunications, and energy – is critical to improving the Command's operational effectiveness. The warming environment in the Arctic – reported to be double the global rate – and the melting of permafrost will severely hinder access, mobility, and security, including runways and radar stations that are on thawing ice or the North Warning System (NWS) along the coastline.<sup>viii</sup>

The North is also currently fuelled by diesel generators and will need to convert to green energy from either small modular reactors (SMRs), solar, wind, hydrogen or a hybrid solution that incorporates all four. Diesel fuel would likely remain as an energy source of last resort. The status quo – exclusively diesel – is not an environmentally friendly option, especially amid population growth and climate change.

The infrastructure deficiencies in the North and the Arctic are far-reaching and include roads, air and seaports, digital connectivity and more. These challenges must be addressed soon.

The modernization of NORAD presents a unique opportunity to address infrastructure concerns within a comprehensive framework that boosts security, promotes cooperation, and fosters sustainable development.

Investing in sustainable Arctic infrastructure is a necessity – not just for maintaining security and stability in the region but also as a matter of strategic foresight that will contribute to the socio-economic well-being of Arctic residents.

The macro-opportunity to Canada is that NORAD Modernization can not only enhance our continental and national security but also meaningfully contribute to regional stability and prosperity.

This is not lost on Canadians.

Nearly nine in 10 Canadian business leaders (87 per cent) in a recent KPMG in Canada survey agree that Canada must remain committed to its level of defence spending to modernize NORAD, protect Canadian sovereignty in the Arctic, and ensure the military has what it needs to support Canadians. Eight in 10 (82 per cent) want to see military spending increased. Further, 87 per cent called it “vital” to increase infrastructure spending to protect Canadian sovereignty and support the Indigenous people of the Arctic.

There is strong support to get this done right. Now it's up to all participants to ensure it does.



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<sup>i</sup> Government of Canada, Fact sheet: Funding for Continental Defence and NORAD Modernization, NORAD (last accessed, February 26, 2024).

<sup>ii</sup> Government of Canada, Canada's Arctic and Northern Policy Framework, (2019).

<sup>iii</sup> Senate, Government of Canada, Arctic Security Under Threat: Urgent Needs in a Changing Geopolitical and Environmental Landscape, (June 2023).

<sup>iv</sup> Government of Canada, The Canadian Critical Minerals Strategy | From Exploration to Recycling: Powering the Green and Digital Economy for Canada and the World (2022)

<sup>v</sup> Government of Canada, Greening Defence, National Defence (last accessed February 29, 2024)

<sup>vi</sup> David Pugliese, Analysis: Cost to modernize NORAD set at \$40 billion, but will final tally be higher? Ottawa Citizen (June 20, 2022); William March, Revisiting NORAD Modernization, Vanguard (July 14, 2023)

<sup>vii</sup> Government of Canada, The Distant Early Warning Line: An Environmental Legacy Project, National Defence (last accessed February 28, 2024).

<sup>viii</sup> The World Wildlife Fund, Climate Change, (last accessed February 28, 2024); Senate, Government of Canada, Arctic Security Under Threat: Urgent Needs in a Changing Geopolitical and Environmental Landscape, (June 2023) at 8.

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