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REPORT

NOVA SCOTIAN PERSPECTIVES ON DEFENCE-INDUSTRY PARTNERSHIPS

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n 27 March 2025, Triple Helix partnered with the Atlantic Canada Opportunities Agency (ACOA) to host a roundtable with industry leaders in Halifax, Nova Scotia on defence innovation. Attendees included representatives from Nova Scotian small and medium enterprises (SMEs) who offer a wide range of defence relevant solutions, from manufacturing, to testing and software - many of which had dual-use implications. This roundtable showcased the diversity and the dynamism of Nova Scotia's industry, highlighting growing potential which the Defence Team can harness as it explores strategic partnerships with industry.

As highlighted in previous roundtables conducted in <u>Montreal</u> (April 2024), <u>Fredericton</u> (July 2024), and <u>Ottawa</u> (November 2024) the current defence procurement and innovation ecosystem and its underlying culture continue to pose a significant barrier to effective industry-government relations in Canada. Systemic issues identified include (1) a rigid approach to procurement; (2) a prime and Ottawa oriented ecosystem detrimental to regional SMEs; and (3) the distance between operators and potential suppliers. For the government to fulfill its commitments in <u>Our North</u>, <u>Strong and Free</u> and spend two percent, and possibly beyond, of GDP on defence within a potentially accelerated timeframe, it must pursue a profound paradigm shift supported by structural changes to ensure maximum value for Canadian defence.

Further, given the souring Canada-U.S. relationship and current trade war, a whole-of-nation approach is a strategic necessity. Securing supply chains, prioritizing intellectual property, deploying capital and enabling commercialization, are all necessary steps to unleash the potential of Canadian industry and establishing the proper conditions for innovation in defence. While this effort will require significant reforms that will take time to develop, Canada's political leadership and the Department of National Defence (DND) must undertake direct and immediate action to set the conditions for success by increasing engagement with SMEs and companies outside of Ottawa and by reducing the distance between operators and potential suppliers. Regional development agencies, such as ACOA, already possess the mandate to facilitate industry-government relationships – which the federal government and the Defence Team can leverage. With additional resources and investment, their role in supporting these efforts could be significantly expanded.

A Rigid Procurement Process

All participating industry representatives agreed that the procurement system is too rigid to properly incentivize innovation. Consequently, the Government of Canada misses the opportunity to acquire the best equipment possible for the military. The main barrier that participants identified was the requirement-based approach to procurement, which lacks flexibility. Currently, defence acquisition relies on extensive option analyses that leads to a requirement-heavy approach to bids. This process would be more efficient if the lists of requirements were more flexible and guided by a specific outcome. Regrettably, this is not the case. Teams evaluate bids based on the list of requirements only, and do not consider specifications that might better fit the



sought-after mission purpose and outcome. This inherently stifles innovation, as requirement and procurement decision-makers — who are often unaware of what innovation is unfolding around the country — operate on a narrow idea of how the equipment should operate and how it will deliver the desired capability. The system is designed to endorse one view of the capability and the outcome, without opening itself to new and innovative ideas.

Such an approach deters resource constrained SMEs, which often cannot afford to invest funds, personnel, and money into a procurement process they feel they are unlikely to win. Additionally, the absence of feedback given to losing bidders prevents the learning of lessons, further deterring future biddings. This creates an ecosystem in which SMEs, many of whom offer dual use solutions, shift their focus towards more welcoming markets, whether in Canada's non-defence sectors, or abroad in places like the U.S. and Europe.

A prime- and Ottawa-focused ecosystem detrimental to regional SMEs

Participants felt this lack of flexibility establishes an ecosystem that allows <u>primes</u> to dominate, to the detriment of SMEs. Despite SMEs <u>representing</u> ninety-eight percent of the Canadian market, large companies, mostly American in origin, maintain the upper hand within the defence market. The structure of the defence acquisition apparatus, which requires an intensive, resource-heavy process to win a bid, favours companies that have the personnel and the funds to dedicate to bidding in defence projects. Further, primes are either located in the National Capital Region or have the resources to have representation in Ottawa to advance their products and interest (or both). Primes are more likely to build relationship with political leaders and with the different force development and requirements teams. This allows the primes to build the trust and relationships needed to effectively engage in the procurement process.

The implementation of <u>Industrial Technical Benefits</u> (ITBs) also contributes to this dynamic. Initially <u>intended</u> to incentivize companies awarded defence procurement contracts to reinvest that income back into the Canadian economy, unfortunately it has fallen short of that objective. Today, the policy lacks the accountability and monitoring mechanisms required to ensure prime contractors fulfill their ITB commitments. It has become easier for prime contractors to pay the penalties instead. In addition, many federal government commercial requirements are simply passed down to SMEs, further limiting their ability to innovate and burdening them with demanding procurement-related processes.

Another area of frustration concerns the current approach to industry relations within DND and the Canadian Armed Forces (CAF). Despite expressing a desire to build deeper relationships with industry, government and defence officials have yet to adopt a more proactive approach to engagement. Meetings and exchanges tend to happen in Ottawa, in contained fora, in which requirement and force development teams present their projects. While valuable, these engagements are limited in scope and are often too expensive for SMEs to access. A more effective approach would be to coordinate more frequent engagements with industry across Canada. These exchanges between industry and relevant members of the Defence Team need to evolve to support



capability projects that reflect a clearer understanding of the state of innovation across Canada. Those exchanges would also help companies develop a sense of the capabilities and operational effects the CAF require to fulfill their missions, allowing them to offer better products and solutions.

Distance between operators and potential suppliers

Current guardrails are keeping end users (relevant CAF members) away from industry, which constrains defence innovation from unfolding. Currently, the only way companies can engage directly with end users is if they have preexisting connections with specific units and leaders. This imposes costs for both service members and Canadian defence companies. End users who acquire insight about how to improve equipment currently lack a mechanism to either communicate this to the relevant requirement and procurement teams or to the companies themselves. As a result, companies continue to remain uncertain whether their products and solutions meet the needs of the military. This situation creates knowledge gaps which often result in duplicative efforts that Canada cannot afford to have in the current geostrategic environment.

Innovation programs, particularly <u>Innovation for Defence and Security</u> (IDEaS), partly enable the closing of this gap. Their <u>sandboxes</u> and <u>test drives</u> may allow for direct testing of a company's product by members of the Defence Team. However, the lack of procurement mechanism at the end of the project prevents the translation of a product into capability for the CAF. Funding research and development remains a critical tool to foster innovation, but the lack of product acquisition at the end of the project creates a vicious cycle of clientelism without delivering valuable equipment to the military. Combined with a procurement process that deters the fulsome participation of SMEs, companies are then pushed to seek out foreign markets.

Defining domestic sovereign capabilities

In light of the current trade conflict with the United States, the government of Canada has started exploring the concept of "domestic sovereign capabilities," meant to identify key Canadian defence capabilities that the government will prioritize and support. Roundtable participants had divergent views on *which* capabilities the government ought to declare "sovereign," but they agreed on the key considerations Canada should consider.

One of the consensuses was that domestic sovereign capabilities cannot truly exist without examining Canada's supply chains, which relates to the "domestic" and "sovereign" aspects of the capability. For example, will "sovereign" and "domestic" priorities require that all aspects of the capability, from raw materials to manufacturing comes from and is being done in Canada? Some participants argued that "domestic" and "sovereign" should entail that if borders close and supply chains become weaponized, Canadian companies should be able to deliver the full capability independently. Others underlined that such a fully Canadian supply chain does not exist,



especially in the production of advanced military technologies. Beyond materials, components, and manufacturing, questions of intellectual property also emerged. For example, who owns the intellectual property, for example if it is a Canadian versus a foreign company operating within Canada will have major implications. Regardless of how the concept is defined, securing supply chains will be critical for its proper implementation. This requires a whole-of-nation approach, one that involves close coordination across the country and across the federal government.

Beyond these considerations, the government ought to engage in a close examination of Canada's research and development, and other innovative efforts from both the private sector and academia. Where do Canada's strengths lie? What sets up its industry apart from the rest of the world? What can be leveraged and prioritized? And, just as importantly, what are the pressing needs of the CAF, and can Canadian entities meet these needs? Defining and implementing domestic sovereign capabilities will require a thorough evaluation of Canada's industrial and research landscape, as well as a strategy to ensure the ecosystem supports its intent and objectives.

Conclusions

Canada faces growing pressure to respond effectively to a rapidly evolving international security environment. Yet, its current defence ecosystem lacks the coordination, flexibility, and speed needed to meet this challenge. As a result, promising innovation within Canada, particularly from SMEs often goes untapped or underutilized. Addressing this gap will require more than incremental adjustments; it calls for a fundamental rethinking of how Canada supports, integrates, and procures defence capabilities.

When implement effective reforms, Canada should first learn from its allies, particularly the U.S., which remains the leading Western power in defence innovation. Roundtable participants discussed how the U.S. Department of Defense (DOD) frequently organizes industry collaboration opportunities. Highlights from the U.S. system include the presence of a DOD team in Silicon Valley, and the existence of specific procurement mechanisms, such as other transaction authorities. However, participants also suggested caution when seeking lessons from the U.S., noting that Canada cannot match the same scale or volume of output. However, exploring how Canada may be able to reproduce some of these programs with considerations for its own resources and demands would be a valuable exercise.

Canada should also move away from its typically linear and risk averse approach to change. While it is exploring implementing more profound changes, it can improve existing programs to help Canadian defence innovation get in the hands of the CAF members. A significant, yet feasible short-term measure would be to add a procurement arm to current innovation programs. This would allow the government's investments in innovation to translate more efficiently into tangible capabilities in a streamlined manner. It would enable the military to receive equipment it helped develop, and help Canadian companies gain credibility abroad. Roundtable participants noted that when a company's home country adopts one of its products, it significantly boosts the



product's international reputation. The longer-term effect could spur the growth of SMEs and the fostering of defence innovation in Canada. Overall, such an effort could bring significant value to the government of Canada, its military, the larger Canadian economy, while improving Canada's global defence reputation.

There is also an opportunity to establish new research networks with regional universities that bring academic expertise to defence policy issues, including procurement and associated innovative efforts. Many of these institutions, such as Dalhousie University, already maintain long-standing relationships with both prime contractors and SMEs. In addition, several universities collaborate with Defence Research and Development Canada on research and development initiatives. Halifax plays a significant role in Canada's defence landscape. It is home to the Centre for Ocean Ventures and Entrepreneurship (COVE), which is part of NATO's Defence Innovation Accelerator for the North Atlantic (DIANA), as well as a major Royal Canadian Navy presence that supports in-person networking and collaboration. Creating formalized networks would help the federal government better leverage regional strengths and contribute to building a true whole-of-nation defence innovation ecosystem.

Currently, economic patriotism is on the rise; Canadians are likely to accept increased defence spending that focuses on Canadian-made technology and equipment. Ottawa needs to follow through to take advantage of this shift in public sentiment. This would directly and immediately support National Defence's commitment to develop strategic relationships with industry and help build the trust necessary for these relationships to flourish. Second, more specifically, it can take advantage of the presence of NATO DIANA in Halifax to promote and support Canadian-made innovation throughout the Alliance. This approach would help encourage defence innovation in Canada while the government makes the necessary changes to build an ecosystem that supports innovation, equips CAF members with the capabilities they need to defend Canada, all the while supporting economic growth.

Overall, a key outcome that the government should prioritize in improving Canadian defence innovation is emphasizing accelerating the defence procurement tempo. Participants emphasized that SMEs are eager to move at a much faster rate, to help, develop, test, and scale solutions at a pace that aligns with the urgency of today's security environment. Accelerating decision making, procurement timelines, and reducing administrative delays would not only make it easier for SMEs to participate in the Canadian defence ecosystem but also ensure that innovative capabilities reach the CAF when they are most needed.

About the Author

Charlotte Duval-Lantoine is the Vice President, Ottawa Operations and a Fellow at the Canadian Global Affairs Institute, as well as Triple Helix's Executive Director and Gender Advisor. She is also a PhD Student at Deakin University, researching Canadian army culture during the 1990s and its influence on operations. She published her MA research on toxic leadership and gender integration in the Canadian military in 2022. The resulting book, The Ones We Let Down, was named among The Hill Times' Best Books of 2022, and has been on the recommended reading lists of General Wayne Eyre, Lieutenant-General Jocelyn Paul, and Lieutenant-General Michael Wright. Her research interests include questions of military leadership, culture change, and personnel policy, topics on which she regularly comments in the media and writes about on her Substack, DND/CAF 101. For her work, Charlotte was recognized as a 2022 Women in Defence and Security Emerging Leader, received the CDA Institute's 2024 Captain Nichola Goddard Award, and was listed amongst the 20 in their 20s by Women in Defence and Security.

She regularly participates in consultation organized by the Department of National Defence and has given talks to West Point and RMC cadets, to the National Strategic Program at the Canadian Forces College, and to the Australian War College.

Dr. Alexander Salt has a PhD from the University of Calgary's Centre for Military, Security and Strategic Studies and an MA in Political Studies from the University of Manitoba. His dissertation explores to what extent has the battlefield experience of the U.S. military influenced post-war organizational innovation. His research has been awarded the Social Sciences and Humanities Research Council of Canada's Joseph-Armand Bombardier Doctoral Award, as well as a General Lemuel C. Shepherd, Jr. Memorial Dissertation Fellowship. He has published research relating to international security and defence policy with Strategic Studies Quarterly, Journal of Military and Strategic Studies, Canadian Foreign Policy Journal, and The Canadian Network for Research on Terrorism, Security, and Society. Previously, he was a Visiting Political Science Instructor with Macalester College and has also held positions with the Centre for Defence and Security Studies, as well as the Consulate General of Canada in Dallas, Texas, and the Consulate General of Canada in Minneapolis, Minnesota.

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