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NAVIGATING THE COMPLEXITY OF DEFENCE PROCUREMENT

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AIM

1. The aim of this paper is to propose an in-house means to improve the procurement cycle for current and future defence capabilities. It is recommended that a procurement specialist trade be established to allow qualified military personnel options to continue to serve in new and unique ways. The creation of a dedicated trade of highly specialized military members to oversee and navigate the complex process will improve all aspects of the procurement cycle.

INTRODUCTION

2. Defence procurement in Canada is likely one of the most challenging portfolios for the government. As of 2016, the Canadian defence industry accounts for 63,000 jobs and approximately $10 billion in annual sales, 40% of which came from the Department of National Defence (DND).[1] The requirement to strike a balance between selecting the right equipment at the right time for the right price has proven to be an incredibly difficult and complex problem, and a problem which has only become more challenging as defence tries to adapt modern warfare, specifically the rapidly changing domain of cyber and software. The traditional procurement cycle will not provide defence the results it needs to meet the current geo-political and technical challenges of national defence.[2] All levels of government, industry and defence will need to work together to streamline the procurement process, incorporating best practices and creating efficiencies where able. This paper takes an introspective look at the greater procurement process to assess areas for improvement to assist in streamlining the complexities of defence procurement to establish the agility necessary to respond to emerging threats and to compete and thrive in the cyber domain.

3. This paper will discuss key issues affecting procurement within national defence and how the creation of a specialist trade would assist in streamlining the process. First, it will summarize the Canadian Defence Procurement System, followed by a consideration of equipment selection and the effects on the morale of soldiers, the challenges associated with the timely procurement of technology, and lastly, it will suggest specific considerations on the role and function of the proposed procurement specialist trade.

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[1] "At a Crossroads: Canadian Defence Policy and the Canadian Defence Industrial Base," April 27, 2016, 1, https://www.defenceandsecurity.ca/media/proxyDocument&a=553&r=142&v=3cfb84e72c0a6bb8ea0865999f88e7f1.

[2] William Richardson et al., "Toward Agile Procurement for National Defence: Matching the Pace of Technological Change," Canadian Global Affairs Institute, accessed February 19, 2024, https://www.cgai.ca/toward_agile_procurement_for_national_defence_matching_the_pace_of_technological_change.

DISCUSSION

4. The Canadian Defence Procurement System is unique when compared with Canada's allies.[3] There are a number of federal government departments and agencies that each have a role in the procurement process for National Defence. Public Service and Procurement Canada (PSPC) and DND are jointly responsible for the procurement of goods and services for DND. While PSPC is the purchasing authority responsible for the solicitation and evaluation of bids, procurement plans, contracting and contract management, DND has the lead responsibility to define the operational and technical requirements.[4] Industry Canada coordinates and administers the Industrial and Technological Benefits (ITB) program and the Treasury Board of Canada Secretariat (TBS) has overall responsibility for the policies, directives and guidelines for government procurement and also controls the preliminary funding for major capital projects.[5,6] There is no single minister responsible for defence procurement at this time,[7] however, there are ongoing parliamentary discussions around establishing Defence Procurement Canada,[8] which may serve to simplify the procurement cycle under a single umbrella.

5. The governance for defence procurement is laid out in the Project Approval Directive. The process is defined by five project phases in DND Defence Acquisitions. They are Identification, Options Analysis, Definition, Implementation and Close out.[9] Each phase has control mechanisms and oversight to decrease project risk and the inappropriate spending of government funds. There are 84 gates or approvals that are needed prior to the release of an RFP.[10] On average, defence projects take 10-15 years to complete the procurement cycle, meaning that from the time the requirement is identified to the time that the project is implemented could take a decade or more.[11] Consider the smart phones in use today compared to those from 10 or 15 years ago, now extrapolate that to military systems that are highly reliant on current technology. If DND is unable to find efficiencies in this process, its equipment will be obsolete prior to its implementation.[12]

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[3] Martin Auger, "Defence Procurement Organizations: A Global Comparison," Background Paper (Library of Parliament, October 14, 2014), 2.
[4] Auger, "Defence Procurement Organizations: A Global Comparison," 2–3.
[5] Auger, "Defence Procurement Organizations: A Global Comparison," 2–3.
[6] Public Services and Procurement Canada Government of Canada, "Defence Procurement Strategy - Defence and Marine Procurement - Buying and Selling - PSPC Services - Public Services and Procurement Canada - Departments and Agencies - Canada.Ca," April 29, 2019, https://www.tpsgc-pwgsc.gc.ca/app-acq/amd-dp/samd-dps/index-eng.html.
[7] Auger, "Defence Procurement Organizations: A Global Comparison," 2–3.
[8] Richardson et al., "Toward Agile Procurement for National Defence," 2.
[9] Department of National Defence Canada, *Project Approval Directive* (Ottawa: Canada Communication Group, 2019), 3.
[10] CADSI, "Procurement at Cyber Speed," 2021, 15, https://www.defenceandsecurity.ca/media/proxyDocument&a=532&r=121&v=8cea4e79cfcc024df8c267806f0e5112.
[11] Richardson et al., "Toward Agile Procurement for National Defence."
[12] Richardson et al., "Toward Agile Procurement for National Defence," 6.

6. Military equipment is more than just a tool of the trade. The right equipment strikes fear in opponents, it creates a solid ground for deterrence and also supports troop morale. Military equipment is the difference between life and death, and properly functioning, modern, capable equipment supports the soldier, affecting their will to fight. Nistorescu from *Romanian Military Thinking* argues this very idea, concluding that "proper equipment will progressively enhance this human aspect of the combat power of military structures, so necessary for success in operations."[13] Thus highlighting the importance of getting the identification phase of procurement right, however, in the modern landscape it is hard to imagine that the requirements defined in 2024 will be the same as those needed in 2039.

7. In the race to war, it is equally as important to consider the capabilities of the adversary. Russia's invasion of Ukraine has highlighted that the post Cold War era is over, and there is a real need to increase and sustain higher levels of defence production.[14] There is a firm belief that quantity is a quality of its own, but for a small nation, quality cannot be ignored.[15] Therefore, the needs of national defence must be clearly understood and articulated through a whole of industry messaging to establish not only quality, producing the right thing, but also quantity, industrial production capacity. Identifying the actual needs to create the required effect is the requirement to support the soldier as well as the defence industry.

8. Another key consideration when it comes to equipment is the ability to integrate with allies. As a middle power, Canada simply does not have the military might on its own to compete in a peer to peer environment. It must rely on its alliances and on the combined military might of the North Atlantic Treaty Organization (NATO), and it must continually work to maintain its interoperability with other members. If Canada does not, it will be left behind and it will not be able to meaningfully contribute in the current security environment, raising concerns over the ability to defend Canada at home and abroad. The current concern with Canada's position on missile defence and the perceived lack of action to modernize the North Warning System is an excellent example of how its allies are becoming increasingly frustrated with a lack of direction on modernizing national defence.[16] With the increasing rate of technological advancements, if DND does

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[13] Claudiu Valer Nistorescu, "Implications of the Forces Equipment with New Weapon Systems on the Combat Power Morale Component," *Romanian Military Thinking* 2021, no. 4 (November 2021): 201, https://doi.org/10.55535/RMT.2021.4.10.

[14] CADSI, "High-Level Industry Messaging 2023," June 1, 2023, https://www.defenceandsecurity.ca/media/proxyDocument&a=728&r=199&v=42346e5ffe21f8a5e101addf65acf143.

[15] "Quality vs. Quantity In Military Procurement - ProQuest," accessed February 16, 2024, https://www-proquest-com.cfc.idm.oclc.org/docview/233030353?parentSessionId=L7kGKSwcg0MGaFBvEQLrArDLEXcVlPKpvCYk26vAQN8%3D&pq-origsite=summon&accountid=9867&sourcetype=Scholarly%20Journals.

[16] Konrad Yakabuski, "Canada Needs to Put up or Shut up on Missile Defence: For Years, Canadian Governments Have Dithered around Modernizing Its North American Defence Policy. That Attitude Is No Longer Tenable," The Globe and Mail (Online) (Toronto, Canada: The Globe and Mail, May 12, 2022), https://www.proquest.com/docview/2662447150/citation/3C5FAA254A0F4C9CPQ/1.

not find a way to shorten the procurement cycle it will constantly be in a state of chasing the tails of its allies until it is eventually left out completely.

9. The CADSI report Procurement at Cyber Speed identifies three problems with the current procurement strategy for cyber. Their findings are not limited to cyber and can be extrapolated to include any equipment that is reliant on technology (refer back to the cell phone discussion). The problems identified are as follows: the procurement process is too slow and rigid; procurement projects are too large and complex; and, procurement professionals need new skills.[17]

10. The procurement process takes between 10-20 years to acquire equipment, with the expectation that the equipment will remain in service for 25 years after that. Unfortunately, if the same logic is applied to the digital age "procurement process is akin to a legacy weapons system. It can get the job done when it needs to, but it is ill-suited to the contemporary security and technological environment."[18] With the rapid advance of digital solutions, taking 10 years to select a new cyber defence product would be unreasonable. However, using an iterative approach, to procurement, reducing the complexity of the project to smaller more manageable chunks introduces agility into the procurement process and provides opportunities to leverage latest developments. Consider the project that was established to upgrade the Royal Canadian Air Force (RCAF) aircraft due to a regulatory change. These mandatory changes had to follow the clunky procurement process in order to access the necessary funding for the software upgrades across RCAF fleets.[19] The final consideration is the need for new skills of procurement professionals. Modern procurement needs to be agile and adaptable. It can no longer be acceptable to define the requirements in year zero and not change or adjust them along the line of project definition and into implementation. Procurement professionals need a variety of skillsets that allow them to easily navigate between industry partners, government of Canada agencies and end user needs. The security environment is changing at such a rapid rate, that procurement cycles will need to become more flexible and fluid. This will be a challenge from a governance perspective, but it must adjust if national defence is to stay relevant in the modern conflict environment.

11. There are a number of aspects of defence procurement that are not within DND's control to change. While it is recommended that DND work to influence the current governance on defence procurement to improve the process, this discussion is beyond the scope of this paper. What DND does control, though, are their people. The CGAI report on Agile Procurement identifies that one of the most important ways to introduce agility in procurement requires a culture shift.[20] Some key aspects identified are picking the right leaders and teams and allowing members to stay in place for the entirety of the project. Neither of these are currently options in how the Canadian Armed Forces (CAF) is organized. PSPC maintain a crew of procurement specialists, but due to their split

[17] CADSI, "Procurement at Cyber Speed," 13–17.
[18] Richardson et al., "Toward Agile Procurement for National Defence," 6.
[19] Richardson et al., "Toward Agile Procurement for National Defence," 5.
[20] Richardson et al., "Toward Agile Procurement for National Defence," 10.

responsibility, their focus is not on project definition, that is the responsibility of DND. CAF members are posted in and out of units on average every three years, limiting their ability to participate in a project for its duration, even if DND is successful in shortening the procurement cycle. DND civilians are also known to move from position to position as a part of their talent management processes.

12. As such, it is recommended that consideration be given to the creation of a Procurement Specialist Trade, including trade descriptions for both officer and non-commissioned members. The trade would be staffed using an in-service selection methodology similar to how the Special Operations Forces (SOF) are organized, ensuring that the trade is staffed with currently serving military members with a diversity of work experiences. These experiences are what will allow the procurement specialists to maintain an expertise with defining the requirements in the initial identification and definition phases of the procurement process.

13. Since procurement of major capital equipment occurs within National Defence Headquarters (NDHQ), the trade would be geographically locked to the National Capital Region. This would facilitate assigning members to a project for its duration, circumventing the military posting cycle. More research should be conducted to determine if geographic stability would assist in overall CAF retention issues.

14. The specialist trade would be bound by training standards and focused continuous professional development to enhance the overall skill-base of those conducting defence procurement. This would establish a better understanding of the procurement process as well as generate a network across the defence industry and other government departments to navigate the various gates and checks ingrained in the procurement process. This network is also a key consideration in the timely procurement of cyber and digital products for defence, allowing the procurement specialists to work directly with industry while developing the project definition.

15. Further, the creation of dedicated military professionals in procurement will bolster DNDs credibility and will build trust in DND's ability to procure military equipment. This improved rapport has the potential to facilitate greater changes to the governance structure imposed on procurement, loosening the checks and balances and further delegating these functions to the project manager level.

16. A procurement specialist trade would create a group of subject matter experts in the field within DND. They would have roles within the organizations of Chief Force Development for the identification phase, Chief of Programme for the definition phase and within the project offices, ensuring continuity throughout the department and throughout the life of the projects.

CONCLUSION

17. Defence procurement is a highly complex activity as it reports to multiple ministers, and navigates through various organizations within DND through the five

phases of procurement. It is critical to get the identification stage right, as the right equipment supports to morale of the soldiers and their will to fight, however it is necessary to build in flexibility in the process to ensure that the equipment remains relevant on receipt to maintain Canada's obligations in the defence of North America and to its allies. Creating agile procurement by reducing the rigidity of the process, the time to complete and the complexity of the projects is critical in adapting to the modern battlefields and the incorporation of the cyber domain. This required the creation of procurement specialists with unique training to easily navigate this new terrain.

18. The discussion provided in this paper is not exhaustive, however, it highlights some key considerations that support the creation of procurement specialists within the military rank structure. These specialists would provide expertise and continuity throughout the procurement process, creating a wealth of knowledge and credibility for DND, laying the groundwork for further discussions to adopt greater changes to the overall procurement process with TBS. This expertise within the Canadian Armed Forces will enhance national defence's ability to get the right equipment, at the right time, to remain a relevant and credible military force.

RECOMMENDATION

19. It is recommended that consideration be given to the creation of a new procurement specialist trade in order to facilitate a streamlined procurement process through enhanced skills, an improved understanding and management of defence procurement.

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