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Robust Military Procurement Reform Now

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POLICY PERSPECTIVE

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By failing to prepare, you are preparing to fail – Benjamin Franklin

In Canada, the recent changes to geopolitical tensions have created a cacophony of knowledgeable voices of concern for the state of Canada's national security, particularly in terms of the Canadian Armed Forces (CAF) and challenges in military procurement.[1] This has largely focused on our financial commitment to NATO to work towards spending a minimum of 2 per cent of our gross domestic product (GDP). The update to the 2017 defence policy *Strong, Secure, Engaged* (SSE) was released on 8 April 2024 and entitled *Our North, Strong and Free: A Renewed Vision for Canada's Defence*. It announced that over the next two decades the military investment needle would increase from around 1.3 per cent to 1.8 per cent. But much of the funding is backend loaded and the lack of a plan to reach 2 per cent has attracted international concern.

In terms of the longstanding performance shortfalls in the military procurement system for major weapon system platforms President of the Treasury Board Anita Anand explained "if you can understand that procurements take time and they require expertise, then you would see the need to have more public servants who are able to work on those procurements, and multiple procurements at the same time, to get them out the door, to spend that money... why would we continue to fill the — fill those — books with additional money, if that money can't get out the door?" In other words, the inability to advance military procurement to meet the CAF's needs is the rationale for not increasing the defence budget. Real reform can no longer be avoided, especially for the expensive acquisitions of complex weapon platform procurement projects.

The need for change was recognized over a year ago when a review of the defence procurement system was launched to identify improvement mechanisms. With an Assistant Deputy Minister in charge, it is meant to be an end-to-end process evaluation including everything from requirements generation and procurement policies and practices to achieving Treasury Board (TB) approvals. It involves all the appropriate stakeholder groups: Public Services and Procurement Canada (PSPC), National Defence (DND), Innovation, Science and Economic Development Canada (ISEDC), and the Treasury Board Secretariat (TBS). At this time, no target date has been announced for completion of this Defence Procurement Review.

But here as elsewhere, the common narrative is to quote generalities needing to be addressed, without the details of how, when and at what cost. This paper focuses on some tactical opportunities to overcome the perennial shortfalls in complex weapon platform acquisitions.

[1] Five references: Paul Maddison, David Fraser and John Scott Cowan, "What Spending Two Per Cent of GDP on National Defence Means for Canada", Canadian Global Affairs Institute, April 2024; Philippe Lagassé, "Getting Canadian Defence Spending to 2% - What could Canada do to boost defence spending quickly"; Debating Canadian Defence, February 2024; Kevin Lynch and Jim Mitchell, "We can't seem to get things done in Canada anymore: how can we fix it", Johnson Shoyama Graduate School of Public Policy at the Universities of Saskatchewan and Regina, 2 April 2024; Vice-Admiral (Retd) Mark Norman, "NSS: Ensuring Canada's Sovereignty Despite its Bad Rap", Canadian Defence Review, 14 March 2024; and Richard Shimooka, "Ottawa's 1980s system of buying weapons is no match for 21st-century warfare", National Post, 21 February 2024

The Narrative of Problems

The list of commonly quoted procurement shortcomings is significant: unrealistic expectations; accountability, governance and leadership failures; discord within the government; the absence of transparency, credibility and trust; layers of excessive processes; a culture of risk aversion that cripples innovation; both unskilled and insufficient personnel which underpin weak project management and cost and schedule estimates; and inappropriate contracts. The result – complex weapon platform procurement projects are consistently delivered late to need.

In a winter 2024 article, Richard Shimooka reminded that these are very challenging endeavours by referring to an often lauded United States Navy shipbuilding project:

> Predictions about increased costs (in Canada) are not out of the ordinary. The U.S. Congressional Research Service predicts buying the first 10 of America's Navy Constellation-class frigate may go 40-per-cent over the U.S. Navy's estimated budget and be delivered several years late… We (in Canada) need to address the lack of understanding and severe frustration in the public by educating that military procurement is unique, highly complex and fundamentally different from any other area of government activity, in that it acquires capabilities at the cutting edge of technology in a contract for a future capability incorporating immature technologies and with high levels of technical risk which results in increased costs, delayed deliveries and sometime performance shortfalls.

Nevertheless, I am reminded of a dressing down I received when in uniform from a grizzled Chief Petty Officer years ago: "I aren't interested in your challenges – when tensions arise, I got to get the ship to sea and excuses don't cut it".

Our North, Strong and Free included a vision and defined objectives for procurement system improvements to achieve an agile procurement system and an equally responsive Canadian defence industry. The stated improvements included "more people to plan, procure and manage capabilities, reform our defence procurement system, and fix outdated processes and systems".

A number of strategies to deliver these improvements were also identified: a pilot of the Continuous Capability Sustainment initiative already under consideration; more dialogue with allies on mechanisms to speed up procurement; completion of the aforementioned Defence Procurement Review already underway; more innovation in government and in Canada's defence industries; and more long term strategic partnerships with Canadian companies. All of this is meant to make the system faster and more effective.

Some of these strategies are obvious in terms of the 'how' to proceed, but others not so much. What remain missing are the actual mechanisms to speed up procurement, to implement improved innovation and to enable long-term strategic relationships with Canada's defence industries. Without enunciating these, any desire in the future to move towards a wartime footing for materiel support remains nothing more than well-meaning platitudes.

Instead, strategies need to be linked to a detailed plan which articulates what will actually be done, by whom, how, when and at what confidence-level-qualified costs. Such a plan was missing in SSE, and the annex identifying progress since SSE in *Our North, Strong and Free* includes nary a mention of any of SSE's intended general improvements to procurement.

General concerns remain in terms of expectation management and transparency, collaboration (rather than discord), governance, accountability, workforce skills enhancement and project management. One is left guessing that the Defence Procurement Review now in progress will address these and more, but without evidence of even a rudimentary plan it is easy to be skeptical.

Practical Elements of a Robust Military Procurement Reform Project

In a recent article, I identified some of the additional approaches required to make meaningful change in terms of culture, governance, external advice, process reengineering, strategic relationships, communications with the public, and skills upgrading. What follows builds on that article with other concrete mechanisms to turn strategies into reality – some of which have been drawn from our allies' methodologies.

Omnibus Military Procurement Reform Project

The improvements desired should be managed as an omnibus Military Procurement Reform Project with the following purpose: to dramatically reduce the time-to-delivery for complex weapon platform procurements, to meet or better our allies' benchmarks without sacrificing effectiveness. Prioritization of the intended change objectives and techniques is essential to enable the 'long poles in the tent' with the greatest potential return on investment to receive immediate and focused attention – such things as broad consultation and purposeful skills upgrading. The project execution team could also benefit from early exposure to the routine techniques employed to better navigate complex projects, some of which are identified in a recent CGAI paper.

Leadership

General (Retd) Rick Hillier recently reminded us about leadership. Although he spoke of political leadership in general, it applies to all levels of leadership in complex weapon platform procurement projects:

> Real leaders have a vision for what can be, a strategy to get there, a plan to execute the strategy and priorities to get things done daily… how they would hold the public service accountable for delivering priorities under the plan… the empowering of personal ambition, initiative and ingenuity. De-regulate, remove red tape… to unfetter and inspire a private sector…

People no longer in government but with significant lived experience in complex defence acquisitions should lead the omnibus project and chair the project's senior governance committee. The project manager of the omnibus reform project should be from DND as the

primary client, with two deputy project managers carefully selected from PSPC and from TB. For all reform initiatives, relevant and current domain knowledge will be critical. Equally important will be embedded advisors from Canada's defence industries, as a minimum from the Canadian Association of Defence and Security Industries (CADSI) and the Aerospace Industries Association of Canada (AIAC).

Mindset Shift

In complex weapon system platform procurement, uncertainty is guaranteed because of the interdependencies of activities, the leading-edge technologies and their novel integration, the multitude of stakeholders involved and the prolonged project lifecycles. Those selected for such employment require a growth and open mindset partly described as follows:

- Risk is expected and often unpredictable.
- High confidence in schedules and costs must await the delivery and trials of the first platform.
- Option selection decisions may have to be made in the absence of clear evidence.
- Requirements require prioritization based on need and value engineering assessment of return on investment, this partially to inform jettison and fitted-for-but-not-with decisions to avoid schedule harm.
- Transparent communications are critical, employing regular briefings on all weapon platform project developments, challenges and status – these to educate, manage expectations, build trust and combat misinformation.

Addressing Interpersonal Conflict

Discord is common and has caused years of slippage in the past. The implementation of organization-wide sustainable and structured collaboration in accordance with ISO 44001 can minimize time wasting conflict, between clients and suppliers and within the government client stakeholder community. More detail is available in a recent paper.

Accountability

In addition to transparent communications as mentioned above, a number of measures should be employed:

- Between government groups, Service Level Agreements (SLAs) should be created that lay out normal responsibilities and time commitments to complete the activities for which they are responsible, supplemented with Responsible, Accountable, Consulted, and Informed (RACI) commitment charts.

- Key members of the project leadership team should all be parties to Project Mandate Letters specifying what they are to achieve, by when, with what delegated authorities, and with what resources and other support – and all with contingencies built in. These should be signed off by a deputy minister.

Governance

Beyond the common attributes of good governance that are readily available, members of senior governance bodies at all levels must clearly embrace a number of proven attributes:

- Invest an extensive amount of time for project governance duties.
- Balance oversight from ground truth exploration with support to the execution team through a servant leadership model and generous delegated authorities.
- Establish integrated governance and key processes for project execution between clients and suppliers.
- Tailor governance membership to be fit for purpose and knowledgeable in the relevant sectors for each weapon platform acquisition project.
- Insist upon comprehensive on-boarding before engaging in decisions.
- Ensure periodic independent governance performance reviews.
- Reshape projects to be governable where there are doubts.

Practitioner Skills

Aside from ensuring people have the relative sector knowledge and experience, a specific career path should be implemented for all who work in complex weapon platform procurement projects. Mentoring programs for project managers and others in leadership positions should employ external personnel with depth in complex project experience and coaching skills.

All organizations (including TB) should clone DND's project management competency development system to qualify candidates to levels of capability that match TBS's Project Complexity and Risk assessment system. Training should be informed by appropriate associations and delivered in part employing existing curriculum. These should include the Telfer School at Ottawa University, the International Centre for Complex Project Management (ICCPM), the World Commerce and Contracting Association (WorldCC) and the International Cost Estimating and Analysis Association (ICEAA) as useful sources of relevant expertise.

Contracts

There are contract lawyers now available in North America who are supportive of more flexible contracting regimes that can enable improved outcomes when executing complex projects – they should advise on their new approaches, and the WorldCC would be a useful contact. Additionally,

two long-term projects should be launched. The first should continually consult the Canadian defence industry on recommended changes to Standard Terms and Conditions. The second should identify contractual innovations to be piloted in every complex project to ensure an incremental continuous improvement process of innovation.

Processes

It has become a best practice for organizations to establish a separate support ecosystem for complex project support, and the Directorate of Project Management Support in the Materiel Group of DND would be the logical owner, augmented by approximately 50 personnel for this purpose. This support team should span all aspects of project development, contracting and implementation. Aside from owning the processes, improvements should be driven by the ecosystem's lessons learned and informed by 'big data' gathering and analysis that leverages AI. It should also include specialized expertise for advanced risk treatment, scheduling and earned value management – all supported with standing offers and the ongoing assessment of emerging techniques globally.

As well, the Comptroller-General at TB should be resourced to create and maintain a unique set of procurement policies for complex weapon platform acquisition projects. And many TBS policies and regulations could be replaced with guidelines similar to the Better Practice Guides of the Australian Department of Defence.

Accelerating Procurement

In addition to the aforementioned approaches, the following mechanisms to accelerate deliveries should also be incorporated:

- Employ 'big tent' events of all stakeholder participants at project launch, before submissions for TB approvals, before releasing Requests for Proposals, immediately after contract award to include contractors, and during industry planning and design phases.

- Seriously consider sole source procurement as an option for every weapon platform procurement, this to include government-to-government procurement (e.g. via the U.S. foreign military sales system and equivalents among other allies). If a wartime footing is required, sole source and military off-the-shelf procurement strategies should be the default procurement strategy.

- Whenever approaching a TB approval, employ a 'swarming' approach of all involved to finalize the submission. It should be led by the appropriate TB executive and avoid the strategy of 'throwing queries and drafts over the wall'. An SLA should commit to three half-day meetings to get a TB submission 'committee-ready'.

- To minimize the months-to-years expended in vendor competitions, employ a general statement of high-level mandatory requirements to qualify bidders, with qualified

companies then invited to present their platforms for technical and operationally trials to inform selection.

- Allow project staff and industry at project launch and after contract award respectively to take time as needed to properly plan project definition and to design platforms respectively, the latter preferably in strategic long-term relationships supported by the proposed Continuous Capability Sustainment methodology and with appropriate funding. Such planning should enable less risky and faster project definition and product production respectively, as well as post-plan generation of comprehensive schedules for each – something especially absent relating to the critical project definition phase within government. And as a footnote, the Continuous Capability Sustainment proposal should not be pilot tested which will require many years; it should be implemented immediately across all major platform fleets.

- Where project personnel are unavailable to launch a project properly, entire project management offices should be hired to execute the project under the oversight of the government's governance and skeletal project office with experienced and dedicated project and contract managers – plus support from ISEDC as required. Alternatively, contracted-in support to government project offices is a must, employing a work methodology as close to a 'master/client' service model as possible.

Conclusion

Without such tangible improvement mechanisms or equivalent, change will not occur in the procurement of modern weapon platforms for the CAF, and actual investment of 2 per cent of GDP will never be achieved even if approved by successive governments.

Interestingly, a report has recently been published by the Standing Committee on National Defence entitled "Time for Change: Reforming Defence Procurement in Canada". Aside from the many recommendations which largely speak to general improvements required, there are some 20 detailed mechanisms in the testimony of the many witnesses that are novel and also worthy of consideration by the Defence Procurement Review.

Only two questions remain: do we pursue radical and robust reform or outright revolution; and how fast can we move out? A warfare footing is our best deterrence posture, and there is much to be both undone and done.

About the Author

After retiring from the Royal Canadian Navy as a Rear- Admiral, ***Ian Mack*** *served for a decade (2007-2017) as a Director- General in the Department of National Defence, responsible for aspects of the launch of the National Shipbuilding Strategy (NSS), and for guiding DND project managers for three RCN shipbuilding projects and four vehicle projects for the Canadian Army. Since leaving government, he has offered shipbuilding and project management perspectives in many papers and in person. Ian is a Fellow of the International Centre for Complex Project Management, of the World Commercial and Contracting Association and of the Canadian Global Affairs Institute.*

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