



CANADIAN GLOBAL AFFAIRS INSTITUTE
INSTITUT CANADIEN DES AFFAIRES MONDIALES

Procuring for Interoperability

by Kiera Antaya
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CONFERENCE REPORT

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LGen Mike Rouleau – outgoing Vice Chief of the Defence Staff

Patrick Finn – Former Assistant Deputy Minister (Materiel), Department of National Defence

Paula Folkes-Dallaire – Minister, Embassy of Canada to the United States and Director General of Defence Procurement for Public Services and Procurement Canada.

BGen Nancy Tremblay – Director General Aerospace Equipment Program Management, Department of National Defence

Braxton Rehm – Director and Subject Matter Expert for JADC2 Requirements & Demonstrations, Collins Aerospace

LGen Rouleau

- The 2021 Budget includes real money to rebalance the capital investment fund as well as targeted spends; the next step is to present the Chief of the Defence Staff a list of capabilities necessary for the CAF to implement what the government asks.
- CAF is behind in implementing agile procurement, due to an inability to articulate coherent concepts, visions, and strategies.
- Accountability and change management need to be improved in the CAF.
- The coming of the all-domain battlespace is happening fast, and it requires a leadership with the cognitive skillset necessary to navigate this new reality.
- The CAF of the future needs to be more agile, more integrated to remain relevant.
- CAF has a competitive advantage in that it is a smaller force; it should leverage this strength to become a force of the 21st century.
- A remaining issue is how to leverage DRDC and IDEaS research and translate them into real capabilities acquired by the Department of National Defence.
- Good leadership and a culture conducive of partnerships can allow for the current system to be used at speed.



QUESTION: *What are the implications for moving towards integration as the Department of National Defence goes about acquiring the capabilities that it needs?*

Patrick Finn

- The current approach to procurement sees the military acquiring equipment, then integrating it as an afterthought.
- While the military used to be gold standard for procurement framework, this is no longer the case. Now, commercial is the gold standard.
- The solutions/technologies sought already exist in industry, the military needs to partner with industry, rather than trying to recreate these solutions.
- The military already uses industry technology, but on an ad hoc basis (e.g., using smartphones).

QUESTION: *How can the CAF make its current fleet more interoperable and keep the connectivity with what it currently has (keeping in mind that some equipment is 10 years old, and other is four decades old)?*

BGen Nancy Tremblay

- Equipment is expected to last years, or more likely decades, which presents a particular challenge as technology and operational requirements change.
- Government needs to have a plan regarding operational outlook in order to know what needs to be acquired.

QUESTION: *What does government need to do to position an industry that is trying to supply it with its own solutions?*

Braxton Rehm

- Government then needs to communicate these goals, priorities, and requirements with industry suppliers.
- The government is going to need an implementation plan if it is going to integrate with industry.
- Allies should share knowledge and learn from each other in this regard, which will build relationships and foster trust.



- The government needs to provide opportunities for industry, particularly smaller companies, to present technologies of interest. For example, competitions that allow suppliers that wouldn't normally submit a bid participate. This exposes the government to cutting-edge technologies, and allows new equipment to be experimented with/exercised.

QUESTION: *If there is a move towards greater connectivity with close Allies, and the U.S. is Canada's closest ally, how do we make sure that the Canadian procurement system is set up in a way that will allow the CAF to get the capability that it wants with the connectivity that it wants?*

Paula Folkes-Dallaire

- Interoperability with allies is a major interest for the U.S., but its own defence goals are the first priority.
- The U.S. is concerned with securing critical infrastructure, in regard to both physical and cyber security, and will want to partner with countries with similar priorities and concerns. Canada must make efforts to protect its own supply chain.
- Regarding FMS, the U.S. has to take into consideration technology concerns (such as whether relevant systems will be compatible, or whether a foreign military integrating a particular technology poses a risk) as well as policy concerns (should the U.S. provide tech to this country, will the capability provided be equal to that of the U.S., is this country able to protect this technology, etc.).

QUESTION: *There has been a move towards defining requirements as performance outcomes; is there a practical way of achieving that?*

Patrick Finn

- The remaining issue is not technical, it is a matter of following relevant standards (whether NATO, IEEE, or other commercial standards), and keeping these standards across the board. It is difficult to ensure that the standards are aligned at the multilateral level.

QUESTION: *How do different approaches to maintaining fleets impact interoperability and connectivity?*

BGen Nancy Tremblay



- The current in-service support framework now aims at sustaining 3 principles: (1) performance; (2) flexibility; (3) economic benefits to Canada. To make it possible, there is strong collaboration with Public Services and Procurement Canada, as well as Innovation, Science, and Economic Development.
- What makes this framework interesting is that it takes a look at the operational requirements, distributes them externally to industry and internally within the CAF to sustain the equipment.
- The process still provides uncertainty for the CAF and industry, as it moves away from the cookie-cutter way of sustaining equipment.

QUESTION: *How industry needs to change to help deliver the capabilities to government?*

Braxton Rehm

- In order to facilitate procurement, industry needs to view themselves as a government partner. Industry can move with agility if it understands the problem set the government is trying to address.
- Government needs to work with industry, as partners, in the designing, testing of technology/equipment. They need to work together to determine how technology can be implemented.
- Additionally, industry should invest in the appropriate networks and security in order to be able to communicate and partner with government.
- Generally, industry does not deal with the layered security levels required by government. This requires industry to make internal adjustments, and also requires government to approve the access.
- The over-use of propriety solutions by industry can pose a barrier to government procurement of technology (vendor lock-in).

QUESTION: *What are the trend lines in terms of sales? How does agility fit into an FMS framework, and how do you make the U.S. comfortable with Canadians implanting American equipment on their own?*

Paula Folkes-Dallaire

- The overall trend is an increase in the volume of foreign military sales, with 500 shipments this last fiscal year (compared to 700 shipments during the height of the war in Afghanistan).



- There has been an overall increase in the percentage of procurement taking place through Foreign Military Sales (FMS), likely a symptom of *Strong, Secure, Engaged's* requirement for interoperability.
- The value of FMS acquisition is increasing, and those are unique to the defence sector. At the same time, increased volatility of the exchange rate and increased inflationary pressures mean that Canada needs to improve the agility of its procurement process.
- The U.S. themselves are also looking to have their procurement match the pace of technology, and Canada will have to follow this direction. The U.S. Military Services have implemented “pitch days” in order to remove the barriers to entry to SMEs and start-ups, while giving the U.S. military access to the latest innovations.
- The U.S. will continue to support Canada while pursuing its own defence goals –but those defence goals are changing (notably cyber and critical infrastructure)

► About the Author

Kiera Antaya completed her Bachelor of Science in Microbiology at the University of Manitoba in 2015. She served as a Naval Warfare Officer in the Canadian Armed Forces from 2013 to 2019, including a deployment in the eastern Pacific in 2017. Since leaving the Canadian Armed Forces, she had been studying cybersecurity at the University of Ottawa. She is also working on a Master of Science at Queen's University, where she conducts computational research and analysis of bacterial genetics.

► Canadian Global Affairs Institute

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