



CANADIAN GLOBAL AFFAIRS INSTITUTE
INSTITUT CANADIEN DES AFFAIRES MONDIALES

Putting Canadian Defence Procurement on a War Footing

by Mark McWhinney
October 2022

CONFERENCE REPORT

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Panel 1 - Defence Policy: An Overview

Moderator - Dr. David Perry

Panelist: Stefanie Beck

QUESTION: *Given the ongoing NORAD modernization process, are there priority implications for other procurement initiatives?*

Stefanie Beck

- Important to note that initiatives are all part of the same continuum given CAF and DND have the same purposive objectives in continental security and expeditionary capacity
- Priority is centered on what it is we do and what it is that we must do; NORAD and continental defence figure prominently in that calculus
- We need to update our infrastructure and prepare for warfare of the future, but that also requires having the right personnel and equipment in place
- A tougher question for government is do we have what we need 5, 10, 20, 30 years in the future; we benefit from multi-year funding and it seems a requisite for that foresight

QUESTION: *There has been mention of different timelines and policy directions, on top of Ukraine taking up bandwidth. How are you prioritizing across directions and variables, and what are the foundations for DND decision making?*

Stefanie Beck

- It starts with having infrastructure that works; priorities are found in the fundamentals, and if we do not have them we cannot expect to go much further
- Items that are rusting out demand the most attention, from there we can think about capabilities in the longer term and the lead times of those multi-year initiatives
- Identification of requirements in the long term is a challenging endeavor given the technology and asset mix of the procurement target
- Government process is not a mystery, but we need to give ourselves enough flexibility to shift as needed throughout the production cycle



QUESTION: *SSE contained a number of streamlining initiatives. Are those initiatives still ongoing, and if not, where have they gone in light of the defence policy update?*

Stefanie Beck

- There is no denying that we want more bigger and better stuff for the CAF; if it is not currently in our hands we need to question whether it is too late to make changes or what we are able to take greater advantage of
- The amount of data that we have is increasing, and with that comes the question of how to properly synthesize it; digitalisation is helpful here, but we need to think about what that means for our procurement targets and the human side of who we need and the skills required to obtain, produce and use said information
- Procurement is not meant to be complicated or lack transparency, and that is reflected in the straightforward nature of policy development beginning with the Throne Speech and moving through implementation
- There seems to be a conventional view that DND/CAF has a tendency to settle for less, but sometimes decisions are made above our pay grade or come from other departments
- We are trying to pick off the low-hanging fruit, but industry also has a role to play
- Competition by default, ensuring best taxpayer value per dollar and appeal processes are structures that produce layers of oversight, meaning more time and justification is necessary
- There is a question of why we have to go through a procurement process each time we are buying or upgrading the same thing; if we are just upgrading, why should we start again

QUESTION: *The fiscal and economic landscape is now much different than when SSE was published. How does defence fit into these new realities?*

Stefanie Beck

- We will see this reflected in the defence policy update alongside the Indo-Pacific strategy
- In foreign policy more broadly, the current and former government(s) has looked at a more whole of government approach; an example can be found in the Department of Agriculture playing a greater role in the Ukraine conflict, which naturally brings the Department of Transport in, who then has to rely on the International Maritime Organization



QUESTION: *There was a bigger push for transparency in SSE around acquisition. Over the last three years that transparency has seemed to wane, so is there a push to bring some of that back to more updates and regular communication?*

Stefanie Beck

- The intent is there and we apologize and acknowledge that we could have done better
- Blame is on the pandemic and a number of shifting priorities; industry is encouraged to look at submitting proposals through IDEaS (alongside looking at what has been done) given how much money is earmarked for the program

QUESTION: *In discussing value for money, Canada seems to place significant emphasis on midlife upgrades, yet these take many years and require significant capital. If the product being upgraded could be replaced rather than going through a midlife upgrade in some cases, would a mix of upgrade and replacement procedures be more responsible? The Cormorant and Griffon upgrades come to mind.*

Stefanie Beck

- At the beginning of the procurement we need to build in realistic evaluations of how long it will take to get to the new target; we plan for delays, so if they do not come up then bonus, but if they do we will have planned for it

Panel 2 - Assessing the Socio-Economic Considerations in Defence Procurement

Moderator - Sarah Goldfeder

Panelists - Stephanie Batstone, Jody Langelier, Sean Willy, Marcel Poulin

QUESTION: *Conversations over the last 10 years have changed and with that has come an emphasis to incorporate socio-economic indicators as part of procurement. With your respective views into the industry, what do you currently see as some of the challenges and best practices? What does success look like, both in general and in ITBs?*

Stephanie Batstone

- From a high level, the policies which incorporate these indicators are working despite the criticism thrown at the ITB policy
- Companies understand the objectives and have made them part of their growth strategies in Canada



- On the challenge side, requirements are becoming more complex for the bidder, and you are starting to lose sight of the objectives in the requirements as you go through the scoring process
- Integration with other parts of the defence procurement system needs to get a bit tighter, because some requirements (e.g. risk assessment) are often in conflict or are distinct (e.g. indigenous participation) from the rest of the process
- Success in ITBs looks like a requirement or scoring mechanism that reflects clear, specific objectives that can be leveraged, but we need to be cautious that we are not trying to leverage socioeconomic benefits in a legalistic view

Jody Langelier

- On the integration piece we are particularly focused in the North and on Inuit-specific land claims
- Procurements requiring Inuit benefits, regional employment, training and development are important for both engagement and economic reconciliation perspectives
- Success is ingrained in the organization; benefits as a part of being should be top of mind when conducting business, not tokenship

Sean Willy

- We have to take a step back and figure out how indigenous businesses engage with defence
- The Western based economy has put policies in place that have inhibited indigenous communities, but the need is for a hand up, not a handout
- We want to ensure value propositions are not misguided because industry has not worked with the right groups of people; mining companies have created some of the best indigenous inclusion strategies
- Success looks like indigenous involvement in all parts of the supply chain, but also in indigenous involvement that goes beyond their traditional territory
- Investing and incorporation breaks the cycle of welfare which has characterized past conceptions of indigenous dependency



QUESTION: *Marcel, can you speak to the socio-economic indicators piece from the perspective of a Tier 1 building those ITB packages, and to how those considerations play out in the business world?*

Marcel Poulin

- Examining bid processes over time has demonstrated the desire to maximize on Canadian content
- As policies have changed, more layers have been added and it indeed has become more complicated, but it has also shown us exactly what the Canadian government wants us to invest in (innovation, communities, partnerships in the North)
- We need to build strong relationships first, which means we cannot wait for the bid process to start and expect to have a meaningful impact in the community
- Most ITB managers see the policy as a cost to do business in Canada, but we should see it as a leverage tool for the best firms and employees

QUESTION: *Is there a danger of siloization in business types as we move forward. How do we prevent companies labeling themselves to gain an advantage? At what point do we worry that this becomes a liability?*

Sean Willy

- It all comes down to the matrix of what you are scoring on, and whether engagement is treated as a checkbox that is simply another part of the procurement bid; we have seen this occur in other jurisdictions so we need to be conscious of the difficulty of long-term relationship building

Jody Langelier

- There is definitely potential for it to turn into a silo, so we need to make sure that as an organization we recognize which opportunities are out there
- From a government procurement perspective there are requirements which still need to be met however, so there is a game of box-checking that needs to be played



QUESTION: *When you look at the overall benefits of these policies, the goal is to fortify the Canadian economy. As companies looking to compete, or as we look to export these concepts, what would be some of your words of advice?*

Stephanie Batstone

- International business goes beyond a specific procurement, so you need to ensure that you understand the culture when coming into a new market
- This means that you have to look beyond the requirements for the RFP, and unpack all of the government objectives in a holistic approach, not procurement by procurement

Marcel Poulin

- The ITB policy keeps the defence industry on the edge and forward thinking, so having the long-term vision for our businesses and making sure we export is of utmost importance

QUESTION: *There has been plenty mentioned on the need for flexibility in approaches. How do you square the circle of increases in flexibility with the constraints of RFP requirements?*

Marcel Poulin

- There will always be mandatory requirements provided by the government, so how we go about achieving them requires greater flexibility
- Changes centered around investment tool sets could help to meet requirements in a different fashion, or there is the potential to increase the bandwidth of the investment mechanisms to allow firms to be more creative

Stephanie Batstone

- There is a lot of room for flexibility in the ITB policy, and that becomes very apparent when you compare it to the older IRB frame
- Potential is there to scale up commitments in particular categories, but we do not want to get too specific in objectives so we can allow room for market forces to complete them in creative ways



Panel 3 - Industrial Capacity, Coordination and Resiliency

Moderator - Commodore (ret'd) Kelly Williams

Panelists - Cynthia Cook, Giles Ahern, MGen Odd-Harald Hagen, Matthew Zolnowski

***QUESTION:** What changes are you seeing in the U.S. moving the industrial base to a war footing?*

Matthew Zolnowski

- DoD strategic stockpile is a black swan planning construct, in contrast to an economic stockpile program that looks at volatility and pricing
- Wartime and peacetime investment positions are very different
- Would characterize posture as one of preparedness, buying down the risk to buy time for the base to go from affordability in peacetime to what is needed in wartime, but there are a lot of problem children in the industrial base

***QUESTION:** Matthew described an environment where the effect of the surge capacity was to empty the bins and move material into the Ukraine, and then begin to adjust the footprint to posture for a sustainable footing. What is happening in the UK?*

Giles Ahern

- The UK recently published an integrated review on security and industrial strategy, but at that point it was a just-in-time policy
- Policy was premised on building better relationships with industry given supply chain issues, then along came the Ukraine conflict
- Understanding that it may take years to develop new supply lines, so the UK is talking to suppliers and SMEs every day to ensure the communication channels are prepared and can look forward



QUESTION: *From a supply chain perspective, it may perhaps be the case that just in time delivery has collapsed because you need everything and you need it now. What is happening on NATO's northern flank?*

MGen Odd-Harald Hagen

- Back in 2008 we got the first signals coming out of Georgia, so beginning in 2012 we ramped up investments and accelerated that process through the 2014 Defence Investment Pledge
- Past decades have been about low intensity conflicts with small units and no need for stockpiles, but we have kept our eyes east for situational awareness
- As the government has chosen to invest more in defence, we have started to build stockpiles so that our armed forces can fight tonight while building capability
- There is a need to have a discussion on risk as a small nation and on the loss of technology; how low can your stockpiles go based on national security interests

QUESTION: *The risk of failure and the risk of losing are having the coalition come together. To fail, what would be the corresponding impact. Cynthia, with the whole impact of technology, the world is looking at a far different battlefield. How do we balance sustaining the technology footprint against the stockpiles?*

Cynthia Cook

- Stockpile issues are evident; the U.S. has enough left for training, but not necessarily for full scale operations
- If a conflict broke out in Taiwan, ammunition stores would be depleted in a week
- Investment in capability is key, but also needed in supply chains and manufacturing which enable flexibility (lean supply model focuses on cutting slack, not flexible processes)
- Future investments should be for supply improvements and surge capacity, but even though discussions have begun, these do not necessarily lead to contracts



QUESTION: *Are you seeing any move in the UK or U.S. to figure out how we replenish stocks from a collaborative perspective (pooling of resources, single requirement documentation etc)?*

Matthew Zolnowski

- The short answer is yes, channeled through getting resources to the problem and finding the right instrument to give sustainment to production
- Major investments being made to the industrial base, but the key piece is that grants or contracts only take you so far; you need to look at the suite of authorities available, including those that are outside defence agencies
- Credit instruments take you further than just cash
- When it comes to collaborative projects, there is the example of Canada being considered a domestic partner in the DPA since 1985, but we want to expand our partnerships with Australia and the UK

Giles Ahern

- Fundamentally, if we are all trying to support Ukraine, we are competing for the same materials and resources, so it is in our best interest to coordinate
- Important to keep in mind that different munitions being provided by different nations can be confusing
- A number of initiatives on centralizing funding and pooling have been presented, but we still have separate industries and we need to recognize that

QUESTION: *The U.S. and Norway have pumped a lot of technology out the door. What is the impact on export controls? Are you seeing a fundamental reset on control conditions?*

Cynthia Cook

- Intentional effort is needed to convert partnership statements into reality, especially given the frustration I have heard from partners on U.S. laws and controls
- Change comes from stressful situations, so a potential outcome is to address these challenging policies and inhibitors (case studies through an ITAR lens)

MGen Odd-Harald Hagen

- There was a sudden sense of urgency when the Ukrainian conflict began, so when we applied to U.S. authorities for third-party capabilities, it took no time at all to get those clearances.



- On more complex technologies, more work needs to be done; allies with niche capabilities should be leveraged for organizational purposes and for the creation of optimal cooperative principles

QUESTION: *Collaboration and cooperation is an emerging theme. Fundamental changes in the sense of urgency are not reflected in the Canadian case, especially compared to NATO and Ukraine. We are not on a war footing, if anything we are adding layers when consumption is on an unsustainable level. Is Canada a laggard, or on the margins?*

Matthew Zolnowski

- I cannot speak to the attitudes in Canada but it is highly contingent on the type of fight you are planning on participating in
- Ukraine is using munitions in a different manner than other conflict theaters, so we should be cautious drawing a straight line to readiness capacity; it is important to capitalize on the sense of urgency, but we cannot get too carried away in the potential linear causation

Gile Ahern

- Ukraine situation shows that some of our peacetime assumptions were incorrect, meaning there is an ongoing discussion on the laissez-faire capability market
- More needs to be done in industry and investments need to be made in onshore capacity for supply security, but this comes at a significant cost; short term decisions based on conflict length are up in the air given that there is no end in sight

MGen Odd-Harald Hagen

- We should be aware of the transition in equipment usage, moving from European to Western equipment and leveraging benefits that come from NATO
- Standardization is extremely important in a case like this where interoperability is a prerequisite, but we need to move from interoperability to interchangeability
- When you zoom out, you need to be wary of the entirety of the conflict spectrum; saboteurs and drone usage in the North Sea speaks to requirement for national resiliency, alongside the desire for capabilities that were needed, but were considerably 'out there'



QUESTION: *The idea of putting industry on a ‘war footing’ is fairly evocative. Can industry get on a war footing if the government of said industry does not follow suit?*

Cynthia Cook

- Industry will not make investments without requirement or promise of funding
- It is certainly a challenging time (high level of inflation, low unemployment, supply chain issues, delivery, long lead times etc.), but managing responses is the job of industry leaders
- We need to create a culture where (contractual) risk taking is supported and a tolerance for failure is accepted

Matthew Zolnowski

- A combination of tools, especially the need for cash flow, is of immediate interest
- Need to get what you pay for, or you don’t get what you don’t pay for, but the underlying desire is greater investment in the defence industrial base
- Having an award from the government is a powerful tool given the non-dilutive, brand value that comes with the contract; if we go into the sub-tiers of the supply chain that do not have direct relations established, this allows them to stand apart from their competitors and tap into private capital
- Need to fold industry into mobilization planning; government will be impressed by the capability of industry when they are told what is required, industry just needs to be part of the conversation

Panel 4 - Canadian Defence Procurement: A View from the Inside

Moderator - Dr. David Perry

Panelists - Troy Crosby, Simon Page, Demetrios Xenos

QUESTION: *A bunch of work is already in contract and a number of big files are in or close to the definition phase. Can you give a sense on priorities/prioritization in your staff and resources on the new work going to tender?*

Simon Page

- The enterprise has not grown enough to match the number of specialists that we require



- You do not just grow procurement officers, they need to have developed somewhere else
- Every project is a priority, so we do not decide on a hierarchy outside of simply wanting to make sure that everything is on track
- Need to be more creative in aligning governance on process once universal priority is established

QUESTION: *Can you speak to us about the process and objectives of the continuous capability sustainment initiative?*

Troy Crosby

- Not all projects are the same in terms of complexity and timeline, and when the focus is on platforms, it is always going to be difficult based on the number of temporal decisions over the life of the procurement
- Technology is moving faster, we need to keep up with our allies and outpace adversaries, so the question becomes how do we keep up with the pace of change
- Money is there, but historically we have taken the mid-life upgrade approach; why not take the same amount of money and invest as needs crop up over time
- Sustainment and transition means you do not have to get everything right from the outset
- This is a model, so it requires no policy change

QUESTION: *Can you provide some perspective on how the ITB has evolved over time, and how the key capabilities construct has evolved between launch in mid 2010s to now?*

Demetrios Xenos

- For ITBs, the big change was the transformation from the pass/fail model of the past to something that is more bespoke for particular projects
- Hand in hand with that were the changes to governance so that departments got pulled in at earlier stages
- Focusing analytical capability on what domestic capacity is and where it is going through research and analysis work on databases and a bi-annual survey with StatsCan to measure what happens with the defence sector in Canada (one of the only countries to do so)



- Industry engagement with RFIs, RFPs, etc remains crucial to give us a sophisticated picture of what is actually out there

QUESTION: *If you could ask for one thing from industry on moving to war footing, what would it be? What needs to change?*

Troy Crosby

- We are not going to move the entirety of defence procurement to a war footing, to do so would be overwhelming, so there has to be a prioritization process
- We will look for opportunities to simplify, delegate and create efficiency, but governance is a way of translating how much risk tolerance you actually have; when the consequences of a mistake are potentially disastrous, that is appropriate
- A focus on productivity is key, it is not just about contracts and money; it is about mobilizing a workforce and if that can spill over to the greater good of delivering the entirety of the portfolio it would be great for the CAF

Simon Page

- We could have the best bureaucracy but nothing happens until a wrench is turned and something fights on the ground, so help us understand this game from an industrial perspective and what we are trying to achieve
- On costing, we have done so well at improving the machine, but when you are costing something not in implementation and where the fruits are not currently observable, costing at that point may be illogical
- The system is not perfect when the transfer occurs between DND and PSPC

Demetrios Xenos

- Feedback from industry is invaluable, and we need to turn toward direct work through the weighted value proposition
- Post secondary institutions are gaining through actions directed through ITB, and while midstream projects took time to get into process, we are starting to see returns
- Because of inflation we have noticed that some environments are more exposed than others, so we need to look to what other jurisdictions are doing as a guide



Implementing NORAD Modernization

Moderator - Dr. Andrea Charron

Panelists: BGen Chris McKenna, BGen Patrice Sabourin, Cheri Crosby, Dr. Martin Tomkin

***QUESTION:** Can you each help us unpack and understand the June 2022 NORAD modernization announcements, especially as it relates to your area of expertise? There was lots of confusion surrounding IT infrastructure and air and space capability.*

BGen Chris McKenna

- Portfolio is everything that is not fighter related
- On surveillance, we have three sides: arctic over-the-horizon detection, space capability and arctic ground-based sensors
- On technology, there is work on Pathfinder command and control, resiliency embedded within PolarSATCOM on the 65-90 problem set, aerospace weapons control expansion, advanced medium and short range missiles, long range air to air missiles, additional aircraft capability (esp. Tankers and airlift), air force infrastructure development and air to ground range modernization

BGen Patrice Sabourin

- A lot of the foundational work is already on the way, but the reality is that we need to build resilience domestically
- Secret Cloud is setting the foundation in Canada to transition our networks that are currently siloed in the data-centric landscape
- Project Pathfinder will enable plenty of data collection but we are not leveraging analytical tools
- There is a necessity to adopt a DevSecOps model to handle all of this data; create a landscape where data is shared by default and protected by exception, where sharing is at the speed of relativity

Dr. Martin Tomkin

- June announcement, alongside the one in August has increased the work for infrastructure vastly



- The portfolio includes 21 bases, 2.1 million hectares of land, 10 million square meters of floor space and 5500 km of road; 25 per cent of infrastructure assets are over 50 years old
- Current northern program is around \$1.7 billion which includes 800 (small subset of 21,000 across Canada) buildings at 16 different sites
- Annual budget is around \$2 billion for \$26 billion of real property replacement cost

Cheri Crosby

- Modernization (\$87 billion over 20 years in cash) builds on the \$50 billion in cash originally invested from SSE on an accrual (amortization of anything that is capital) basis
- From a cash perspective that is almost 5 billion in the next 6 years
- Of the \$87 billion, just north of \$50 billion is for infrastructure, which on top of what we are already spending each year
- I worry about our capacity to deliver; we are loaded up on trying to increase our capability with people, but being short on military members also spills over into the civilian side

QUESTION: *We know that a lot of the announcements require decisions on the chicken or the egg. How do we ensure the divide on old versus new announcements are managed effectively?*

BGen Chris McKenna

- From an RCAF perspective this is well trodden ground; as we discuss with American colleagues on what we need as a cohesive whole, our investments are aimed at the inseparability of the continent
- Strategic tanker transport capability has enormous implications for infrastructure
- Investment raises liability for lines of task, so responsiveness on deterrence and defeat mechanisms is key from the NORAD point of view (persistence is anchored in the previously mentioned tanker capability)

BGen Patrice Sabourin

- The 'new-new' is relatively small, because we understood what was needed to modernize
- Most of the work aligning through Pathfinder was already underway; the new work is on what the structure will allow through C2 (situational awareness of the battlespace, extraction of the 'so-what' to be presented to the decision-maker, and execution once the decision has been made)



Dr. Martin Tomkin

- Our big priority is upgrading forward operating locations, alongside the over-the-horizon-radar
- With that goes the entire scope of the other projects, so we have to ask to what extent is infrastructure involved in acquiring the capability of those systems

QUESTION: *Many projects are projected over 20 years. NORAD has struggled to be a priority and we are facing a lot of economic pressure. How do we make sure we aren't taking future money for present problems?*

Cheri Crosby

- SSE funding agenda will peak around 2027-2028, and then NORAD expenditures will pick up
- We are not yet at the stage to manage SSE and NWS modernization as one big bucket of money
- We have current robust, existing governance on how we implement and manage projects, but we will need to get better at looking at a broader bundle of initiatives for the purposes of integration

QUESTION: *NORAD modernization and continental defence does not happen without partners. We have heard very little from the United States. But there are also industry and rights holder considerations. How do we ensure proper partnerships and relationships for infrastructure priorities?*

Cheri Crosby

- The \$87 billion announced is discrete funding that stands alone for NORAD modernization unlike NWS funding in the past that was shared with the U.S.; we work closely with our U.S. colleagues to determine needs in an integrative fashion

BGen Patrice Sabourin

- Partnership with industry is important; incremental building of capability through investment is more sustainable than big bang financing
- There will be critical improvements required for command and control that do not exist yet; if we try to write it as a requirement on a piece of paper we are likely to get it wrong



QUESTION: *Can you talk about affordability in the current context?*

Cheri Crosby

- In defence we are subject to economic instability immediately, especially with our purchasing power, and our basic needs for manufacturing will be impacted by inflation
- Costing expertise is being refined and we are quite capable of costing compared to before; designing something new is tricky and requires various risk management strategies in our costing
- We will likely feel a loss of about \$10 billion in purchasing power, this will have an impact

QUESTION: *Support for Ukraine is getting a lot of attention. Is NORAD modernization threatened by, or complimentary to, putting defence procurement on a war footing?*

BGen Chris McKenna

- One risk we need to keep in mind is talking about NORAD modernization in the absence of SSE targets
- Threat has been demonstrated in Eastern Europe, but we do not want our allies to perceive us as a continent only partner.
- NORAD modernization implies significant modernization of large parts of our military that goes beyond the continental and into the expeditionary realm

Procuring for the Alliance: The Defense Security Cooperation Agency

Moderator: Dr. David Perry

Speaker: James Hursch

QUESTION: *Can you expand on CSC and its nature as a non-program of record.*

- Over time we have found requests and requirements have needed bespoke considerations or bespoke requirements
- The defence industry is capable, so it is about working with the acquisition system to do so efficiently



- We have provided additional funds to handle non-programs of record and watch this on a continuous basis

QUESTION: *Are there other forums for collaboration that you think can be reinvigorated? If so, what are the elements we should be discussing?*

- The NTIB provides a means to explore opportunities for defence industries to work together
- The Ukraine contact group has also risen up over the past few months and while quite a bit has been moving, it is unclear as to how it comes out
- There is a demand signal now that is different than that of the past
- This is a key time for the Canadian government to provide input that they may have for the benefit of the organization

QUESTION: *Is (current) success characterized by working harder, or has it manifested with exceptional authority?*

- Presidential authority is exceptional, only brought up in cases of emergency
- We have received unprecedented levels of authority to draw down out of our stocks, but we need to be cautious to ensure our stocks are still ready for our own purposes
- Ukraine security assistance fund is an unusual bespoke authority that has been given to us because of the situation. Scale of say Bosnia drawdown, for example, pales in comparison to Ukraine

QUESTION: *What works best in the foreign military sales system, and where can we improve?*

- For 80-90 per cent of procurements the foreign military sales process works well
- What works best is that the U.S. defence industry provides the best products and services, and as a customer you get the full weight of the U.S. government in your negotiation with the contractor
- To improve, we want to get better information up front and to ensure we are better aligned with the acquisition system so we can better align contracting timelines (currently working through the development of a foreign military sales ‘tiger team’)



Overcoming Workforce Issues

Moderator: Kathleen Monk

Panelists: Jeff Tasseron, Bill Ferreira, Christine Clarkson

QUESTION: *What are some of the largest labor challenges you are seeing in your sector and their primary drivers?*

Jeff Tasseron

- Industry programs are affecting our daily work as managers; there are about 85,000 people in direct aerospace jobs in Canada with another 130,000-145,000 indirect jobs
- Attrition models are quite varied, but the historic annual replacement rate was around 45-55,000 per year; our current generation rate from university and college programs is about 16,000
- The average age in the sector is 54, so drivers (demand signals, geopolitical ripple effects) are a deeper question
- Convergence of technologies and capabilities in other sectors that traditionally did not compete with aerospace/defence

Christine Clarkson

- It is a war for talent; employees are following interesting work from one company to another
- Competition is driving up salaries, so it is all about defining your value proposition, driving your supply and promoting/branding which jobs are available
- We are competing with the high tech sector, so we need to connect with our purpose as new people come in; we are here to serve those who serve

Bill Ferreira

- We have identified that the industry will lose 22 per cent of the current workforce over the next 10 years so the recruitment challenge is not solely domestic
- The problem is that construction does not necessarily interface well with immigration
- Perceptions need to change because young people have little exposure to the trades; we will not find all the workers we need domestically



QUESTION: *It appears that the labor force does not meet the demand. How does current forecasting align with our needs?*

Christine Clarkson

- Retirement is a big issue, and we see it coming in the forecasting, so we need to understand skills gaps and bring people in with a focus on mentoring
- One strategy is to grow talent (Thales just rolled out a new grad program focused on developing business acumen for juniors), but another is to examine core competencies and then develop partnerships with SMEs to fill gaps

Bill Ferreira

- Construction industry is mostly made up of micro-businesses so it is tough to get them to engage in apprenticeship development
- Federal government is putting a lot of money into apprenticeship development and promoting careers in the skilled trades because the process is front loaded and difficult to navigate; Feds are trying to promote careers in the skilled trades
- While the government is engaged, demographic challenges amplify the issues

QUESTION: *We are seeing a generation of employees and workers who are looking for different benefits and work life balances. What are your ideas on kick-starting early/better engagement within the sector?*

Jeff Tasseron

- I think something that would be couched as a national defence industrial strategy which is focused on workers, but needs to fit with Millennial/Gen Z concerns
- As part of the great resignation, we see a groundswell of people who are not happy because there is dissonance in what they thought vs what they got; there is an untapped demographic there
- Irony is that it is not that different from the CAF problem; there is a need to provide attractive value propositions, solutions and pathways that lead to what young workers desire

Christine Clarkson

- Need to focus on juniors and ask why they are here; purpose, and doing something that represents the country is often high on the response list to that question



- We may have to revisit the unicorn approach to recruitment on must-haves versus need-to-haves; education is only one aspect (how specific does the degree need to be?)
- Many juniors are only aware of traditional defence roles, but we need to brand well beyond them for better exposure to what the industry has to offer

Bill Ferreira

- Everyone laments the fact that shop classes are gone so we need to reinvent the way we advertise our industry to young people; bringing young people to sites is a great start
- Would be nice to align specialist professions with red seal trades to help transition from CAF to private sector (helmets to hardhats as a fine example)
- We continue to preach for harmonization of standards, yet provincial discretion on trade certification continues to hinder efforts
- Similar problems with security regulation; you cannot move your clearance between departments, so how can we expect contractors to move between projects

Keynote - The Future of CAF Force Development

Moderator: LGen (ret'd) D. Michael Day

Speaker: General Wayne Eyre

QUESTION: *It is appropriate that the keynote for this event is the CDS in the context of growing great power competition, a strain on resources, COVID, stress in government and a looming recession. There is little understanding of the role of the CDS in the acquisition and procurement process, so what does that look like?*

General Wayne Eyre

- Role is the principal military advisor on policy to the government (esp. the deputy minister)
- A lot of engagement done with stakeholders in and outside of DND discussing the needs and demand signals on addressing the challenges of the future (people, equipment, sustainment)
- The position is characterized by the wielding of influence
- Also act as an advocate and an advisor to the services through regular bilateral meetings with the service chiefs



QUESTION: *If I try to unpack that in terms of specifics, let us focus on the interaction with the service chiefs. How does that work and where are your priorities?*

General Wayne Eyre

- Begins with an examination of the threat environment
- What we are currently facing (a reshaping of the international order) looks pretty dire given it is what our prosperity is based upon; investments in defence are therefore a necessary requirement
- Our inflation is partially blamed on our inability to deter Russia, but there are also the challenges presented by climate change, the pace of technological change, the shifting societal landscape, the makeup of the workforce and demographic changes more broadly
- We are also seeing toxicity that comes from polarization; this all means that we are seeing a change in the character of conflict, and this drives different priorities in investment
- The conflict in the Ukraine has demonstrated the importance of networking, so capability prioritization in that is at the top of the list
- Need to reduce the decision cycle
- Also seeing trends on integrative combined arms and joint capabilities in all elements at power; we need to get better at it, because our adversaries are doing it well below the threshold
- Deterrence becomes important below that threshold to maintain the rules based international order
- Want to be a net provider of security, not a net importer
- Trends in robotics, autonomous systems, long range precision strikes, air defence, signal management and the subsurface domain are being watched closely

QUESTION: *How do you exert influence on the chiefs, and manage the priority of effort to make sure the system doesn't get stalled?*

General Wayne Eyre

- It is a strategic management problem of epic proportions given our personnel shortages
- Trying to push everything through the challenging process in an era of shrinking staff horsepower does not compute
- One of the ways to square the circle is to look at history (What did we do in 1939 and 1914? How did we react?)
- In those moments we took risk, and cooperated with industry; where we take that risk in the present will be important



QUESTION: *How do you advise on that risk? Or how do you rank privilege?*

General Wayne Eyre

- There is not a single solution for this so we really need to understand the realm of the possible on getting projects through, and then apply influence where necessary
- I am concerned about staff capacity, and there is no silver bullet solution as Dr. Perry has once described; if it is death by a thousand cuts, it requires a thousand band-aids

QUESTION: *If we move to some other issues, there are a series of platforms coming online and a new navy appearing over the horizon. How do you get people ready to handle these new platforms in concurrence with the procurement piece so they move apace?*

General Wayne Eyre

- There are a number of critical vulnerabilities, and the ‘people’ part speaks to reconstitution efforts
- We need to rebuild our ‘people strength’ by energizing recruiting and retention, addressing personal management, looking at every act through the lens of reconstitution and economizing on mid-level leaders who will train and implement the next generation of staff and initiatives
- Reconstitution is only one element; in the context of modernizing, and despite our desire to build up quickly, the here and now will always be within the situational context we face, and we need to handle that
- There is also the culture change piece, and evolving our culture is necessary to ensure that we are fit for our intended purpose
- Finally, there is physical modernization; advancing all four of those forward and ensuring investment is properly placed is crucial

QUESTION: *In order to accomplish that significant list of tasks, what needs to give? Do we slow down procurement, do we change the optionality of providing tasks to partners? Where do we find the capacity in the system?*

General Wayne Eyre

- One option is giving more thought to which activities we accept, and which operations we provide
- Security force capacity building as an example:
 - We have traditionally taken officers away from units so those leaders can train others. In the south of Ukraine we have young corporals and privates training Ukrainian troops under the supervision of NCOs which grants significant



experience to our youngest soldiers. We cannot use this model to do everything, so the missions where we can, we want to economize mid-level leaders

QUESTION: *Let us pivot to the messages we are trying to send. You have talked about your assessment of great power competition, but we are also facing an era of competition amongst industry partners. We are asking for the same things that our allies want, but the capacity does not exist to fill every order. Do you have conversations with your allied counterparts on how you play in that space?*

General Wayne Eyre

- As Chiefs of Defence Staff we do not hold the levers, but we can advise; we are all concerned
- As we take a look at the specter of great power conflict, one of the lessons is that great power wars are never short, so our high power weapons will be depleted, and we need to figure out how to replenish them
- Need to have a balance on precision versus mass in weaponry and the calculus often does not add up
- Investment in more lower cost weapons should be thought about; this tension plays out in force development
- Character of conflict demands more precision and more tech, yet we still require more mass based on what we see on the ground in Ukraine

QUESTION: *It begs the question that up until now our history has been about general combat capability. We have tried to be all things to all people. Does part of this tension move us into certain niches?*

General Wayne Eyre

- Challenge with niche warfare is that if you get a niche wrong, you are in a position of significant risk
- There are things we can possibly be much better at, such as ASW, so the question then becomes whether we double down on that capacity, and whether the risk calculation is justified



QUESTION: *What we are trying to do is put together the challenges that we are facing, but with a system that is never as nimble as we like, with an approval process that will never be able to manage our aspirations, and with an international environment that spoils what we want to do. What can the audience do to rectify that?*

General Wayne Eyre

- “National prosperity is based on our ability to defend the international order, so we ask if our society is worth defending. If it is, we cannot do it alone. We need a whole of society approach to get our numbers back up, to encourage our youth that service is important, and to understand that we are all on one team.”

► About the Author

Mark McWhinney is a PhD student in the Department of Political Science at Carleton University. He holds a BA in Political Science and History from the University of Windsor and a Master of Applied Politics from Wilfrid Laurier University. His research is fixated on the coalescence of climate change and defence imperatives through a neo-institutionalist lens, specifically focusing on procurement discourse, governance and reform.

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