

44th PARLIAMENT, 1st SESSION

# Standing Committee on National Defence

**EVIDENCE** 

# **NUMBER 065**

Tuesday, June 13, 2023

Chair: The Honourable John McKay

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● (1545)

[English]

The Chair (Hon. John McKay (Scarborough—Guildwood, Lib.)): Colleagues, I call this meeting to order.

We're running a little late, but we'll be able to extend the time to 5:45 and divide it into the two hours.

For the first hour, we have, from the Office of the Auditor General, Karen Hogan, the Auditor General; Andrew Hayes, deputy auditor general; and Nicholas Swales, principal.

You are familiar with this committee, so we don't need to do instructions. You've already warned me that you might be a second or two over the five minutes, but nevertheless, at the great discretion of the chair, I'm perfectly prepared to allow that, given that you're the Auditor General.

Thank you.

We look forward to what you have to say.

Ms. Karen Hogan (Auditor General, Office of the Auditor General): Thank you. I'll try to speak quickly—and I apologize to the interpreters now—so that I can squeeze it all in.

Mr. Chair, thank you for this opportunity to appear before your committee as part of its study on procurement processes and their impact on the readiness of the Canadian Armed Forces.

I would like to acknowledge that this hearing is taking place on the traditional, unceded territory of the Algonquin Anishinabe people.

Joining me today are Andrew Hayes, my deputy auditor general; and Nick Swales, a principal who is really our expert on national defence matters and has done many audits on procurements.

There are a number of themes emerging from our audits linked to defence procurement that I would like to highlight for the committee.

First, I'll speak to delays and scope changes and the impact they have on the timely renewal of fleets. When fleet renewal is delayed, aging aircraft and ships remain in service beyond their planned useful lives or are retired before replacements are operational. Keeping aging aircraft and ships in service also means increased operating and maintenance costs.

In 2021, we audited the national shipbuilding strategy, which was launched in 2010. It calls for the building of different classes of at least 50 large science and defence vessels over some 30 years.

Overall, we found that the delivery of many ships had been significantly delayed because of challenges in design and construction.

For example, welding problems were discovered in the offshore fisheries science vessels, problems that required time to investigate and repair. This delayed construction schedules for other vessels, increasing the risk of not having the vessels ready to do what we need when we need to do it.

Our recent audit of the surveillance of Canada's arctic waters, which this committee studied in December 2022, found that delays and their impacts persist. The audit also found risks of gaps in surveillance, patrol and presence capabilities because of aging satellites and patrol aircraft that may also reach the end of their useful lives before replacements are available.

The replacement of Canada's fighter force is another example of delays and their impacts on readiness. Canada bought its CF-18s in the early 1980s, expecting to replace them after about 20 years of service, but this did not happen. In 2016 the government directed National Defence to have enough fighter aircraft available every day to meet the highest NORAD alert level and Canada's NATO commitment at the same time. This meant that National Defence had to increase by 23% the number of fighter aircraft available for operations. To meet the demand, the government purchased used fighter jets from Australia that were about 30 years old and have the same operational limitations as Canada's fleet of CF-18s.

[Translation]

This brings me to the second theme I want to highlight: If you don't have the people for the use and upkeep of the equipment, the readiness problem remains.

In the case of Canada's fighter jets, National Defence expected to spend almost \$3 billion to buy and operate the Australian aircraft and to extend the life of its fleet. However, it did not have a plan to deal with the shortage of experienced pilots and the CF-18's declining combat capability. Purchasing additional aircraft was not enough to meet both the NORAD and NATO requirements.

In 2022, as part of our update on past audits, we found that National Defence had increased the number of aircraft and pilots available for operations but not technicians. As National Defence was still implementing its recruitment and retention strategies, some positions had yet to be staffed.

The final theme I want to bring to your attention today is inventory management. We have been raising issues in this area through our financial audit work for some 20 years. We further examined the military's supply chain in a performance audit in 2020. We found that military units received materiel such as spare parts, uniforms, and rations late 50% of the time. High-priority items required to satisfy critical operational requirements were late even more often, at 60% of the time. These delays, often caused by stock shortages, affected National Defence's capacity to perform its duties and manage its resources efficiently.

These audits underscore the importance of supplying Canada's military and renewing fleets in a timely manner to avoid capability gaps that may jeopardize Canada's ability to meet its domestic and international obligations for science and defence.

Mr. Chair, this concludes my opening remarks. We would be pleased to answer any questions the committee may have.

Thank you.

• (1550)

[English]

The Chair: Thank you, Madam Auditor General.

Mr. Kelly, you have six minutes.

Mr. Pat Kelly (Calgary Rocky Ridge, CPC): Thank you.

In your report of 2021, which you mentioned in your opening statement, you said at paragraph 2.14, "The delivery of many ships was significantly delayed, and further delays could result in several vessels being retired before new vessels are operational."

Is that still the case? Have steps been taken since your report to rectify that?

**Ms. Karen Hogan:** We did look on the periphery when we did our work on the surveillance of Arctic waters. In the shipbuilding strategy audit, we noted there were delays and that there was very little wiggle room for further delays to happen.

When we looked at surveillance of Arctic waters, we found that those delays have persisted. In that report, I would actually point you to an exhibit where we show when the useful lives of ships were supposed to end, how they might be extended and when new ones are expected.

There could be a gap in surveillance capabilities and in availability of equipment if something isn't done and if National Defence doesn't address the issues of untimely—

**Mr. Pat Kelly:** What about ministerial accountability? We heard from the Parliamentary Budget Officer about the mixed accountability between multiple departments.

Would a single minister make a difference and be a helpful way to better control these projects?

**Ms. Karen Hogan:** When I look back at all of our work, I don't think we ever found anything in our work that would bubble that up to the top as one of the key risks to address.

I must admit that personally, I'm not too fussed about whether it's one department or many departments that are involved. What is really needed in a procurement process is the right skill set. This isn't about buying boots; you need some specialized expertise—

Mr. Pat Kelly: Does PSPC possess that specialized skill?

**Ms. Karen Hogan:** I think they are experts in procurement. That's where you need the combination of defence and the needs...from National Defence.

If you had one entity, you would have to make sure it had all the skills that entity needed and the expertise to make—

• (1555)

Mr. Pat Kelly: Does it exist presently?

**Ms. Karen Hogan:** I think when you look at the combination of the Canadian Armed Forces, National Defence and PSPC, yes, they have the skills. The lack of timely decisions, I think, is rooted in other places.

Mr. Pat Kelly: Where?

Ms. Karen Hogan: I would point to a few things.

There is really not very good life-cycle planning when it comes to military procurement. The gaps the country is potentially facing didn't sneak up on Canada; you knew that there would be a useful life to a ship or an airplane. Planning ahead for that needs to be done better.

I would then point to the complexity of the procurement processes. It isn't just about buying a good anymore. Many of the procurements are trying to accomplish many things, whether they are about creating an industry, as in the shipbuilding case, or trying to have economic benefits come out of procurement. There is a trade-off when you try to accomplish many things in a procurement.

Finally, I would point to not really having a stable outcome. What should the Canadian Armed Forces look like and what does it need? There needs to be better consensus about that across the government.

Mr. Pat Kelly: One of your specific recommendations was paragraph 2.46, which said, "Public Services and Procurement Canada should improve risk management tools at the National Shipbuilding Strategy's management level to enable thorough risk analysis, specific, time-bound, and measurable risk mitigation...[and] better monitoring of the implementation of risk mitigation measures".

The department agreed. Has it implemented any of these recommendations?

Ms. Karen Hogan: I'm going to have to ask Nick if he might want to jump in on that.

We have not followed up further than seeing the detailed action plan that they would have provided to the public accounts committee when it had a hearing.

Figuring out that contracting relationship and agreeing on how to share risks, I think, is something that is essential to speeding up the procurement process. There is a benefit to off-loading some risk, but then that risk needs to be off-loaded if that's the case, not taken back on by the government.

There's merit in trying to refine that and working that out better.

**Mr. Pat Kelly:** Is risk aversion maybe born of a lack of expertise at the lower levels of PSPC? Does this contribute to delays?

**Ms. Karen Hogan:** I'm not sure I would point to risk aversion as being what's contributing to delays. I think it is about moving outcomes and changing priorities and objectives. When you take time to make a decision, technology changes and then you need to revisit it. It's a bit of a cycle.

More timely decision-making and knowing what the intended outcome is would help with mitigating procurement delays. I'm not sure I would link it to risk aversion.

Mr. Pat Kelly: How do we get more timely decisions?

**Ms. Karen Hogan:** I think it's about having consensus across the government on what the Canadian Armed Forces should look like and what it needs. That would be a place to start.

The Chair: Thank you, Mr. Kelly.

Go ahead, Mr. Sousa.

Mr. Charles Sousa (Mississauga—Lakeshore, Lib.): Thank you, Chair.

Thank you for being here today and for recognizing the complexity of these decisions, these procurement processes and the time it takes just to qualify the prospective proponents, especially for the big-ticket items.

I think you inferred that there is obviously a lot of requirement for more personnel. You certainly highlighted delays, and that's why we're having this discussion. It's because we're all concerned about the delays and the ability to be responsive to the needs as they come about. The fighter jets have taken so many years to come to fruition just by making a decision first.

You talked about the delays being a big issue; you talked about personnel being available—or enabled, or having the expertise within those decisions—and then you talked about inventory management and some of the delays in trying to maintain a proper inventory. I presume you're able to audit this stuff effectively, notwithstanding some of these delays. You're obviously recognizing the problems.

What are the solutions? Do you have solutions for the issues that are before us? What do you suggest we do?

**Ms. Karen Hogan:** I wish I had a crystal ball and I could help with all of the procurement issues, but I would say that procurement—

An hon. member: I can't really hear.

• (1600)

The Chair: I can't either.

Can the Conservative side cool it down?

Please continue.

Ms. Karen Hogan: I would say that you need personnel and you need capacity. There's capacity that's needed on the procurement side. What we mentioned was not forgetting that it's not just about needing procurement capacity; you need to also think about the personnel to use the items that you're buying—so pilots or captains—but then you also need maintenance and technicians. That is part of what I would call planning for the life cycle of an item that you purchase.

I believe that having consensus on what the Canadian Armed Forces needs and then staying on that.... When you talk about the fighter jets, there were changes in what was needed, and further commitments were made. Originally, the commitment was about meeting a certain spend threshold, and then it was about meeting NATO and NORAD's highest alerts, so all of that adds to the capacity that's needed.

I tend to wonder whether or not there is a sense of urgency in Canada to equip our military and our troops properly. Maybe that sense of urgency is something that needs to be brought into the mix

**Mr.** Charles Sousa: Considering the war that's happening, Ukraine is enabling us to be a bit more sensitive to our engagement.

What about the shipbuilding strategy? Are we able to fulfill some of what's being proposed?

**Ms. Karen Hogan:** The shipbuilding strategy is one of those areas that I think is contributing to some of the delays. I talked about trying to accomplish a lot in a procurement process where you have trade-offs. When you're trying to establish an industry to be able to build and repair ships in the country, that comes with a trade-off, so there's slowness—speed is one of those trade-offs—and potentially costs. You have to balance that in a procurement process.

It comes down to a policy decision on whether the procurement is about getting ships, or whether the procurement is about getting ships and establishing an industry or a technological base in the country.

**Mr. Charles Sousa:** One of the recommendations made by a former witness was centralization—having a specialist procurement office to coordinate all these efforts under one roof.

Do you think that's effective, given the complexity that is there, that's going to be made, and the need for Treasury Board, ultimately, to make those decisions?

**Ms. Karen Hogan:** Whether you have one person or many involved in the procurement process, if the decisions keep changing, there will be delays. It's about having consensus on what the Canadian Armed Forces need.

Mr. Charles Sousa: That's right.

On capacity, one of the questions was, do we have the capacity and expertise in-house to do this?

**Ms. Karen Hogan:** Do we have the capacity to do military procurements now?

**Mr. Charles Sousa:** How much do we need to enhance this? Obviously, it's not because you're suggesting that we're delayed—

Ms. Karen Hogan: I haven't done an assessment on how many procurement personnel would be needed in order to meet the demands, but I would argue that the current capacity in procurement across the federal public service is lacking. It's not even just in the military. It's in other areas. Look at IT procurements. There is a lack of capacity and expertise across the public service, in general, in procurement.

Mr. Charles Sousa: Is the expertise there, within the capacity we have?

**Ms. Karen Hogan:** I would like to think that our Canadian Armed Forces have the expertise they need on what is needed—on what the military will need to carry out its responsibilities effectively. It's about ensuring you have the right procurement officers to support that.

As I said, I did not do a detailed assessment to know whether or not we have all that expertise. In each of our audits, we highlight that delays are mostly around decision-making. It's the timing of decision-making that results in delay.

Mr. Charles Sousa: Thank you.

The Chair: Thank you, Mr. Sousa.

[Translation]

Ms. Normadin, you have the floor for six minutes.

Ms. Christine Normandin (Saint-Jean, BQ): Thank you very much, Mr. Chairman.

Ms. Hogan, thank you for being here and for your opening remarks.

I'd like to come back to the lifespan and life cycle of equipment. You mentioned that we often have to extend their operational life beyond their lifespan, and that this generates fairly high costs. So I'm going to ask you a question in two parts.

Does it happen almost systematically that we exceed the useful life of the equipment we have?

If so, is it because we're over-estimating the useful life of the equipment? Since the unexpected always happens, shouldn't we build in a buffer period by reducing the estimated lifetime of the equipment by a few years, to make sure we never reach or exceed it?

I'd love to hear what you generally think of this.

**(1605)** 

**Ms. Karen Hogan:** The useful life of assets is an audit challenge every year. It's not just ships and aircraft; it could be a computer, for example. Analyses probably underestimate the lifespan of equipment, but the military is very good at extending it. However, this generates more costs.

Once you extend the life of a ship, it costs a lot more to keep it afloat. That's why I wonder about the equipment used in the Arctic. We know that Arctic waters are tough on equipment. So this is no surprise. We know that the equipment is going to exceed its useful life

What do we do about satellites, for example? From the moment we buy equipment, we should think about its life cycle. If it has a lifespan of twenty years or so, we should say to ourselves that after about ten years, we'll determine whether it's time to start the contracting process to provide for its replacement. I find it a little odd that Canada isn't more proactive in this regard.

**Ms.** Christine Normandin: If I understand correctly, it would be better to make a slightly more modest analysis of the lifetime of the equipment, even if it means replacing something whose lifetime could be extended, rather than going almost systematically beyond the lifetime of the equipment.

**Ms. Karen Hogan:** That's exactly it. We also have to take into account the evolution of technology. If Canada wants to keep its equipment up to date, it needs to think in terms of life cycles and ensure that contracts are awarded on a more regular basis. In doing so, we ensure that no equipment shortcomings hinder our surveillance activities.

# Ms. Christine Normandin: Thank you very much.

You said there weren't enough technicians to maintain the CF-18s we got from Australia. Should we limit our acquisitions if we know we won't have the manpower to maintain these aircraft? Or, on the contrary, should we just go ahead with the acquisitions anyway, since training the workforce may take less time than the acquisition process itself?

How do you strike a balance between available manpower and our ability to maintain the aircraft we buy?

**Ms. Karen Hogan:** It's funny, but I'd rather present you with the other side of the coin: if we had the personnel, pilots and technicians, the sense of urgency to replace our equipment would be stronger. We'd have to have enough equipment to make sure we can meet the government's commitments, internationally and domestically.

So we can see one side of the coin or the other.

Ms. Christine Normandin: Thank you very much.

I'd like to come back to what you mentioned about inventory management. Units receive material late almost systematically, especially when it's critical material. I think you mentioned that, in this case, it was late 60% of the time.

Do you have any specific recommendations about inventory management for this kind of equipment? I'm not talking about large acquisitions, but rather equipment subject to more frequent replacement. Are there any specific issues that could already be addressed for equipment with more frequent inventory turnover?

**Ms. Karen Hogan:** This is an issue we've raised in our financial audits as well. You mentioned our performance audit, but every year the issue of inventory management at the Department of National Defence is raised in the Public Accounts of Canada. Many recommendations have been made. The Department of National Defence has a ten-year strategic plan. It makes progress every year, but it takes time.

As part of the performance audit, we recommended making sure that all so-called critical requests really are that. Sometimes, people claim that a regular request is critical in order to speed up its processing. That sometimes happens, but the big problem really is inventory management. You have to be able to plan to determine what material you need, where and when.

In short, we need better inventory management. The government doesn't manage its inventory effectively, but it's very good at responding to emergencies. We even gave an example in our report where the government was able to get the needed equipment, but the process wasn't efficient because there were a lot of transportation costs, in particular. In the future, we need to better estimate the day-to-day needs of the Armed Forces.

• (1610)

**Ms.** Christine Normandin: Therefore, it's important to avoid describing every ask as urgent just because that's how it'll get dealt with more quickly. Otherwise, if everything is urgent, nothing is urgent anymore.

[English]

The Chair: Thank you, Madame Normandin.

Next, we have Ms. Mathyssen for six minutes, please.

Ms. Lindsay Mathyssen (London—Fanshawe, NDP): Thank you, Mr. Chair.

Ms. Hogan, in the United States there was a six-month investigation done on military spending. It was done by 60 Minutes. That prompted several senators to ask the Secretary of Defense to do an internal audit. The audit found that the military procurement process was plagued with arbitrary price inflations from the industry itself. It cited two major factors from its investigation, namely, the consolidation around a handful of industry players, and a massive reduction in public servants dedicated to evaluating procurement projects.

At some point, some of these companies were boosting their total profits by about 40%, and sometimes as high as 4,000%. There's a U.S. federal law that says that it will not allow military equipment to be sold to international customers at any price less than the U.S. pays.

Would you extrapolate from that, as we look to purchase American equipment from those same producers, that they would then inflate the price of what Canadians would be buying?

**Ms. Karen Hogan:** I'm not sure I know the study you're sharing with me. If the statement is true that foreign purchasers shouldn't pay less than what the American purchaser is paying, at best it would result in an increase cost to Canada.

**Ms. Lindsay Mathyssen:** Is there nothing in terms of what the Canadian procurement process does that looks at what international costs are, and how they're potentially gouged? Does that impact at all on how our own procurement process looks at things?

**Ms. Karen Hogan:** Canadian procurement is usually an open and transparent process meant to ensure there are competing bids in order to reduce and avoid that kind of arbitrary price inflation. That's typically why our procurement process requires an open and transparent bidding to be done.

Andrew, did you want to add something on that front?

Mr. Andrew Hayes (Deputy Auditor General, Office of the Auditor General): I might just add that competition law would also enter into that aspect of ensuring that there isn't dumping or price inflation conspiracy, that sort of thing, which is against the law. It comes down to whether or not the procurements are also structured to make sure we get best value and that price is a consideration that will drive the procurement decisions.

Ms. Lindsay Mathyssen: There are two points on that.

Mr. Sousa was sort of getting into that, and you said you weren't sure.... There was an internal report by the Department of National Defence in Canada that said they were 30% short of 4,200 positions of trained procurement experts, and they've been struggling with that for years.

The Department of National Defence, within procurement, lacks the expertise in terms of physical personnel to do that study to ensure things like that don't happen.

If you could comment on that first, then I'll get to the second point.

**Ms. Karen Hogan:** Well, I said I hadn't really done an assessment on military procurement capacity, but that I can say there is a gap in procurement capacity across the federal public service in many areas. I raised IT.

In many audits that we do, we hear about the delays in procurement because there are no procurement officers. In fact, my own office struggles at times to have the right capacity and the right skill set in our procurement group. It's definitely across the whole public service, and that likely contributes to the 30% to 40% determination that you mentioned.

**Ms. Lindsay Mathyssen:** In terms of that ballooning cost, it being industry driven and the fact that we are shifting.... There was an idea, of course, of what you talked about, that open-contract, competition-based sourcing. However, the government is moving to sole-source procurement.

Can you comment on how that will influence the costing as we move specifically to sole source?

• (1615)

**Ms. Karen Hogan:** I guess it depends on what else you're trying to accomplish with those sole-source procurements, whether there are competing demands, and, as Andrew mentioned, if the dollar value and the value for money are part of the procurement decision. Sometimes it's about the timing. Other times it's about the other economic benefits. It might be about ensuring that there's an industry created in Canada.

All of those are trade-offs that impact the price, the delay. It's about what you want to accomplish in a procurement, other than just acquiring a good.

**Ms. Lindsay Mathyssen:** You see the issue, though. With the F-35s, for example, there was a sole source. They went to open competition. They eventually went to the Americans. The Americans are seeing now, through investigations, that they are being highly, highly gouged by certain companies. We buy at a certain competition rate. We do it in a sole-source fashion. Now that we're moving forward in other purchases, we don't have enough people to look at that competition.

Yes, competition law may say that's not possible, but if we don't have all of those pieces in place, is that not a problem in terms of driving up those costs?

The Chair: We need a very brief response, please.

**Ms. Karen Hogan:** Well, delays in general drive up cost, don't they? They go hand in hand. Not having the right personnel, not having a timely decision and not having a fast procurement will all be factors that contribute to that. I'm not sure I could point to just one thing to drive up a cost in a procurement.

The Chair: Thank you, Ms. Mathyssen.

Mr. Bezan is next, for five minutes, please.

Mr. James Bezan (Selkirk—Interlake—Eastman, CPC): Thank you, Mr. Chair.

I want to thank the Auditor General and her office for being here again.

Ms. Hogan, does the Department of National Defence give you access to all of the information you need to do your job when you're auditing anything? You have all of the security clearances needed; they don't withhold anything, so if you want to see contracts, you can see contracts.

**Ms. Karen Hogan:** Typically, we have absolutely no concerns whatsoever. Many of our personnel have the right security clearances that are needed, and if we don't, we would ensure we are able to get those. We have not at this point with National Defence had any concerns about access to information.

Mr. James Bezan: When you did your study on national shipbuilding and you were looking at the procurements in both AOPS surface combatants and joint supply ships out in Seaspan, you were able to see those contracts to ensure that taxpayers are getting a bang for their buck.

**Ms. Karen Hogan:** Absolutely. We've been able to see all of the contracts we wanted to see during our audits of National Defence.

**Mr. James Bezan:** Every report, when we get it back, already has a response from the government that they agree with the recommendations you're making. When your office is drafting a report, is there a back-and-forth between the government and your office when the report is being drafted, with respect to the wordsmithing or even changing the recommendations that you are making to National Defence?

**Ms. Karen Hogan:** At the end of every audit, we always ensure that we verify our facts with the department. We always clear factual accuracy and ensure that we received all the information. We then talk about the recommendation.

There is a bit of back-and-forth about the recommendation, absolutely. It is to ensure that the recommendation is something that the department will implement and that it will meet the goals of addressing the gaps and the issues we identified. There's no point in our putting forward a recommendation that no one will implement or that they just say they will and then do not do anything about it.

I would not say it's about negotiating or wordsmithing that recommendation. It's about making sure that it's an achievable recommendation that addresses the weaknesses we found.

Mr. James Bezan: Your predecessor in 2018 on the fighter jet replacement, when we were looking at the F-18s and buying used Australian jets, in a draft report that was leaked, said, "In our opinion, the government does not need to spend \$470 million to buy used F-18 fighter jets that are as old and have the same combat capability deficiencies as Canada's current fleet". He went on in the recommendation, saying, "National Defence should not purchase interim aircraft until it implements plans to recruit and train pilots and technicians." That was in the draft report.

The final report says, "National Defence should develop and implement recruitment and retention strategies for fighter force technicians and pilots that are designed to meet operational requirements and prepare for the transition to the replacement fleet."

It was definitely a change in tone. It was definitely not, "Don't bother wasting taxpayer money on the Aussie fighter jets." Are we seeing this happen more often, or is that just a one-off?

#### • (1620)

**Ms. Karen Hogan:** I can speak a little to that situation. In my mind, that was really touching the policy line, the policy decision on whether or not the planes should have been purchased. In my view, the government had made a commitment to meet the NO-RAD's and NATO's highest level of alert. We needed planes in order to be able to do that. That's a policy decision.

I have not, in my time as AG, seen us change unless we were missing facts, missing information or our recommendation was really one that the department would not implement. Our goal is to improve the public service, not to spend time to not result in a change.

**Mr. James Bezan:** On that comment "to improve the public service" and with the study that we're doing, National Defence is looking at improvements in procurement of National Defence and getting the *matériel* and equipment that we need in a more timely and less costly manner. What are your recommendations to this committee on how we speed up the process of buying equipment? How do we make sure that...? You already touched on it, that there aren't enough people who specialize in buying defence equipment.

Where's the sweet spot, where we can do our fiduciary duty of respecting taxpayer money and get the equipment that our armed forces need in the dangerous world we live in?

Ms. Karen Hogan: I've said this before, but I'll put it in two points. It starts with having consensus on what the Canadian Armed Forces needs and what it should look like. Then it's about going ahead with the procurements to meet that end state but thinking about the whole life cycle planning of your procurement. It isn't just about getting the good; it's about having all the people that you need—

**Mr. James Bezan:** Our army doesn't care about life-cycle costs; our army cares about what assets we bring to deal with the threat environment, so—

**Ms. Karen Hogan:** I hear you, but the public service should care about life-cycle costs.

**Mr. James Bezan:** That's right, but how do we do it in an expedited manner to deal with the challenges that we have?

**The Chair:** What I care about is the time. Mr. Bezan's time is expired.

Maybe you could circle back in on Mr. Bezan's question at some point in the future.

Mr. Fisher, you have five minutes.

Mr. Darren Fisher (Dartmouth—Cole Harbour, Lib.): Thank you, Mr. Chair.

Thank you very much to you, Ms. Hogan, and to your team for being here.

It's been a really interesting conversation. We've talked about a lot of similar things here, but I want to go to the national shipbuilding strategy.

You talked about trade-offs and the balance between, perhaps, quick procurement and building an industry, as we're doing in Canada. Traditionally we've been boom and bust. We build a cou-

ple of ships and then we send those folks off with skill sets to, hopefully, find other work. Then, maybe 30 years later, when we need new ships, we try to do the same thing.

You talked about 50 ships over 30 years across the country, but specifically in the Atlantic region, each ship is, I would say, vastly more efficiently built than the previous one was, although I think the increase in efficiency levels is getting a bit smaller incrementally as we build more and more ships. What we're seeing now in Nova Scotia, specifically in Halifax—and they cut steel in Dartmouth—Cole Harbour as well—is that we're building an industry of expertise and capacity in shipbuilding.

I can say for a fact, from what I've seen, that this is really valuable in terms of the spinoff jobs and the expertise that's being built—with some of the best shipbuilders in the world now—in Canada. It seems to be the way to go.

Your job, of course, is finding value for money. Do you find value in that building of a domestic capacity, where the value might not be seen on day one but might be seen closer to the middle or the end of the contract?

**Ms. Karen Hogan:** The shipbuilding strategy really had three objectives: renewing the fleet, creating a marine sector and generating economic benefits for Canada. You're right: Many of those are really long-term objectives.

Today it's hard to tell you that there is value in that investment, but that's the policy choice that the country has made to go forward. Now it's about tracking and not forgetting about those, but they come, as I said, with trade-offs. Creating a marine sector comes with some delays as they get ready to reach that target state that was intended within the shipbuilding strategy.

Where things could have been sped up is with respect to the length of time to negotiate those contracts to figure out who pays for what. Is it the private sector? Is it the government? How do you get to that place?

It took about seven years from the first umbrella agreement with the shipyard to the first ship. That's a very long time to just negotiate what needs to happen. That then delays the building of all future ships.

Value for money can be weighed in many ways. While there might be economic benefits, the delays and the cost of extending service life might offset those. Again, it comes down to more timely decision-making with respect to what the Canadian Armed Forces need.

#### (1625)

**Mr. Darren Fisher:** If we move away from the national ship-building strategy and that type of thing, do you think that historical boom and bust might be a reason for past delays in the procurement of military products?

Ms. Karen Hogan: You mean if we move off-

**Mr. Darren Fisher:** No, I mean the historical boom and bust. Is that something that has caused those delays?

**Ms. Karen Hogan:** I don't know about that. Not everything the military needs can be built in Canada. It's about figuring out exactly, from a strategic point of view, what should be built in Canada and what should be procured outside of Canada. That might help. If the decision is that ships should be built here, then what is the trade-off? What other things maybe shouldn't be built here? That's a strategy choice to make.

**Mr. Darren Fisher:** Mr. Sousa touched on unfilled positions. I just want to get a little clarity here. You said that we have the experts in procurement and we have the skill sets, but we have a gap in capacity. Is that strictly a person-power thing, a manpower thing? I understand that we're in competition with the private sector for some of these skill sets and for some of these experts as well.

**Ms. Karen Hogan:** I would argue that Public Services and Procurement Canada has a ton of expertise in procurement. When I say the Canadian government has procurement expertise, it does.

Does it have the capacity to handle the volume of procurement? I don't believe so. We see that in many areas across the public service. I mentioned not only military, but also IT procurement. Especially on that front, there is competition with the private sector, and there's just a shortage of expertise in that area.

The Chair: Thank you, Mr. Fisher.

[Translation]

Ms. Normandin, you have the floor for two and a half minutes.

Ms. Christine Normandin: Thank you very much, Mr. Chair.

Ms. Hogan, I'd like to pick up on a comment you made about the need for consensus on the future of the armed forces. I'd like to hear more from you on this subject.

For example, you could tell us about what is being done in other countries, where it seems a policy review is done by public servants every two years to ensure continuity in procurement, rather than making policy changes after every election.

Is this something we should consider?

What, specifically, is the problem with how long a policy lasts and consensus around that policy?

**Ms. Karen Hogan:** This is what we're seeing in aircraft procurement. There have been changing decisions with regard to what direction to take and how many aircraft the country needs. So there needs to be a consensus about what the armed forces need and the state they should ideally be in. I still wonder whether our country fully understands how urgent it is that we equip the Canadian Armed Forces.

In our audit on the monitoring of Arctic waters, we identified some shortcomings. I wonder why Canada isn't more proactive. The ice is melting and the waters in the Arctic are more navigable, so there will soon be gaps to fill. Right now, there are already gaps in terms of satellites and ships. What will it take to speed up procurement? I think our country needs to have a sense of urgency and reach a consensus.

**Ms.** Christine Normandin: To address that, don't you think it would be a good idea for the analytical work to be done first by public servants, and then endorsed by politicians? At the moment, it's more or less the other way around: policies come more from political options than from the grassroots. We need better ongoing monitoring.

**Ms. Karen Hogan:** I think we need to recognize the fact that this is one of the roles of the public service. We should be thinking long-term, about the future and the next generations. Political cycles can be very short; four years in power, and sometimes even less than that, is not very long.

There has to be a good partnership between government and public servants. That's very important when it comes to national defence procurement.

**•** (1630)

[English]

The Chair: Thank you, Madame Normandin.

Go ahead, Ms. Mathyssen, for two and a half minutes.

Ms. Lindsay Mathyssen: Thank you, Mr. Chair.

Interestingly, that was going to be some of my questioning.

Do you think the urgency of climate change is adequately presented within National Defence's priorities, in terms of how we procure and respond to what's needed?

**Ms. Karen Hogan:** What we found in our audit on Arctic waters is that there was an assessment and gaps were identified. Then, after a few years, there was a reassessment and the same gaps were confirmed. Then it was done again.

It's the need now to make a decision to deal with that. As I mentioned earlier on, the gaps we're going to see in our ability to surveil the north, or for ships—icebreakers or other ships—didn't sneak up on the country. They have been known. Where is that sense of urgency to make that decision? Is it linked to targets moving? Is it linked to procurement capacity? There are likely many things that contribute to it. It needs to start, I think, with knowing the end state. That requires consensus, then moving forward.

I can speak longer, if you'd like.

**Ms. Lindsay Mathyssen:** In your 2020 report, one of the recommendations—you mentioned it somewhat here, already—was that National Defence review its materials forecasting positioning to ensure sufficient stocks are maintained at the right locations. I've spoken to folks within UNDE. For employees, one of their major concerns, of course, is the privatization of those positions out of bases and so on.

Could you comment on that?

**Ms. Karen Hogan:** It's my understanding that the concerns the union raised are linked more to services being provided on bases. It's cleaning services and things like that, not necessarily the procurement of—

**Ms. Lindsay Mathyssen:** These are the people who maintain and ensure others have the kit they need, and who order them as needed and so on, as I understand it.

**Ms. Karen Hogan:** I think our audit focused on the goods the military needs and how that stock is managed. The country is very vast, and there's a military presence across it. It's more about making sure you have the right materials where you need them and less about servicing the buildings or bases. That was outside the scope.

**Ms. Lindsay Mathyssen:** Would you know what stocks you need if you don't have the people to take inventory of those stocks and adequately track them?

**Ms. Karen Hogan:** A lot of the stock on the bases is managed by the military, and the main depots are really managed by some military personnel. While there might be a combination of non-military and military there, my experience, as I visited some of them, was that they were mostly military folk.

The Chair: Thank you, Ms. Mathyssen.

Next, we have Mrs. Kramp-Neuman for five minutes.

Mrs. Shelby Kramp-Neuman (Hastings—Lennox and Addington, CPC): Thank you, Mr. Chair, and thank you, Auditor General and colleagues, for being here today.

My first question is just to clarify something you stated earlier. With regard to the report itself, if the government says, "No, we're not going to proceed with that," and if it's not even in the report, if the Auditor General thinks it's important, how can the government not proceed with it? What is the purpose of doing the report if there's not going to be any movement on it?

**Ms. Karen Hogan:** If we had a recommendation on which the government said, "We're not going to do that," and we felt it was really essential, we'd leave it in there, and tell the government to disagree with us. We'd have that conversation in an open and transparent way.

When I talked about making sure it was something the government would implement, those were minor adjustments. It's about, "I think you should do it this way," and, "Well, could we do it that way?", and, "Absolutely, you could do it that way." It's those kinds of adjustments. It's not about this being a recommendation you shouldn't get. That's why it's key that it has to address the recommendations we raised.

Andrew, you're looking at me as though you want to jump in.

**Mr. Andrew Hayes:** Yes. I'll give you an example. We had a disagreement on a recommendation in relation to the COVID benefits, and the recovery from the Canada Revenue Agency. We made a recommendation going in, knowing full well that we'd have a disagreement on it.

In other cases, maybe we were coming close to the policy line, and we could achieve the recommendation's spirit in a different way. Another example of that is the temporary foreign worker program. We wanted to make a recommendation about the quality of

the living quarters, and we did, but we didn't want to trample on provincial jurisdiction, so we had to adjust our recommendation.

In the example that was given earlier regarding our fighter jets, that's an example of where we're coming close to the policy line. Looking at that recommendation at this point in time, and our audit objective at the time, which was about supporting the ability to meet NORAD and NATO obligations at the same time, we focused the recommendation on the personnel.

• (1635)

Mrs. Shelby Kramp-Neuman: Let's talk about the government's alignment of defence procurement with retention and recruitment. Simply put, are there adequate measures in place to ensure we have the personnel to maintain and operate the equipment we've purchased from the time it's delivered? To complement that question, can you provide numbers of how many pilots and technicians we currently have?

**Ms. Karen Hogan:** Nick might want to add in there. Following our audit, and in our follow-up on past audits, which is a tool we have only online that you can look at, we wanted to go and see how the CAF was doing on ensuring there were sufficient pilots. It has made some progress there on the pilot and procurement front, but it really hasn't made much progress on the maintenance and technical crew. It still had an ongoing process, and that's why we couldn't comment on it.

I don't know if you know, Nick, about the number of pilots. Do you have any numbers you can share?

Mrs. Shelby Kramp-Neuman: If you could circle back to the committee with numbers, if you have any, that would be helpful.

**Ms. Karen Hogan:** We might not have it, though. It might be best to ask National Defence. Unless we've audited the pilots themselves, we wouldn't have that information. We'd have to go to National Defence to ask for it.

**Mrs. Shelby Kramp-Neuman:** Earlier, you mentioned the importance of creating industries and recognizing how this can absolutely work. We've seen examples in Canada of when it works and when it doesn't.

Do you feel there's a danger to the industry and CAF operational capabilities if we try to create an industry where none exists, just because we want and/or need the jobs in Canada, but then the industry fails?

**Ms. Karen Hogan:** That's why I made the comment earlier about it being a strategic decision on what should be built in Canada, what can be built in Canada and why. That really is a policy choice. I don't believe Canada can build everything it would need. We are a small country, and it's about where Canada can excel. That's a decision that should be made, so that the focus on industrial benefits really has the most enduring quality for Canada.

**Mrs. Shelby Kramp-Neuman:** This is my last question. You spoke earlier about delays in procurement, as they may occur, because the government needs to balance CAF needs with economic benefits.

Do we need to do a better job on balancing the immediate needs of the CAF and the potential long-term industrial and technological benefits?

**Ms. Karen Hogan:** I think, quickly, I would answer yes. Again, it goes back to that comment on the consensus on what the Canadian Armed Forces should look like now. What does it need? Then, when does it need to be there? Where is that sense of urgency? When should that sense of urgency kick in?

The Chair: Thank you, Ms. Kramp-Neuman.

Ms. O'Connell, you have five minutes.

Ms. Jennifer O'Connell (Pickering—Uxbridge, Lib.): Thank you, Mr. Chair, and thank you, all, for being here today.

Based on what you've described in terms of the procurement process, it sounds like the expertise is certainly there, but we've said, time and time again, that it's the capacity issue. It almost sounds like, when there's a big contract coming, everybody works together to deal with whatever that need is. They move forward once that's completed, and then everyone goes back to move on to the next big thing.

I'm just wondering if, perhaps, especially for the CAF, since the equipment requires.... If we're using the example of shipbuilding or purchasing aircraft, it requires that constant long-term planning. Is part of it, perhaps, not a dedicated team or looking at...? Instead of a dedicated team, it's more of a need-by-need basis. It's kind of a flurry in government, working on something and then moving on to the next big thing.

Would that be a fair assessment, or what is it that doesn't allow for that constant long-term planning and reassessment?

**Ms. Karen Hogan:** I guess I would tell you that I believe it's about having that life-cycle planning thought out first and not just reacting, "Oh, we're going run out of certain types of ships. They're no longer in service. Maybe we should think about replacing them." It is about having that long-term thinking. I would argue that there are so many pieces of equipment in the Canadian Armed Forces that, yes, you would probably have a dedicated team, in the long term, doing that if you really were planning on a full life cycle for major equipment in the armed forces.

## • (1640)

**Ms. Jennifer O'Connell:** However, it doesn't sound like that. There may be a CAF dedicated team, but in terms of that focus, even if you get that next contract out tomorrow, the day after that you begin the process of the next 15-20 years. Governments often

don't work that way. It's that immediate check and then move on to the next big thing.

How we create that within the public service is number one. Number two is that balance of democracy. Different parties are going to be elected on different platforms based on what Canadians send them here, so there's not always going to be that consistency in policy.

How do we balance the public service work but allow that public discourse or change of priorities to still exist? It's that balance that I'm struggling to figure out.

**Ms. Karen Hogan:** I guess I would point to one of the findings in our surveillance of Arctic waters. Actually, in all the reports we're talking about today, there are long-standing, known issues—long-standing, known gaps. A ship doesn't have an unlimited life.

Regardless of what the main political or policy decision might be, there is a certain level of ships that Canada will just need, especially to monitor the Arctic. That base should fundamentally be there, and there is no acting on those long-standing, known gaps until they are creating a potential gap in surveillance, which is what we're seeing now if something isn't done.

Again, while consensus might take some time, there should be a base level of what is needed, and that should be maintained. The commitment made to meet NORAD and NATO's high alert is one that was made many, many years ago. That requires a large number of aircraft. That commitment is still there, so then you need to have the public service work towards continuously being able to meet that commitment, including the spending commitment that's been made.

Ms. Jennifer O'Connell: That's part of the question that I hope we home in on a bit better throughout this study. Every government wants to make the announcement and those commitments, but they don't want the line item in their budgets. We have to figure out how to make sure that continuous funding is part of the ongoing discourse, so that it's not the question. That's the fight every time: the cost and going to the public. How do we make sure that the public service and procurement work is ongoing behind the scenes, so that at least governments have choices, but we're not in a situation where it's not ready even if we wanted to make that investment?

**The Chair:** Ms. O'Connell is extremely clever. She asks her question right at the end of her five minutes.

Because of your efficiency, we're going to ask you to answer Ms. O'Connell's question and then wrap it up.

Thank you.

Ms. Karen Hogan: Thank you.

I would point to the need for consensus on what the Canadian Armed Forces should look like and their needs. That shouldn't fundamentally change. We are one country. We need to do what's right to support our troops. That consensus is needed to ensure that there are no longer gaps for what the military needs.

The Chair: Thank you, Madam Auditor General and your colleagues.

As I sat here, I couldn't help thinking that in the course of this committee's being empanelled and doing what we do, the threat environment has changed dramatically. It doesn't seem to have penetrated the government writ large, whether it's the civil servants or the politicians. We don't have the luxury of time. Even if we ever had the luxury of time, we no longer have the luxury of time.

This study does have maybe an urgency that two years ago or even a year ago it wouldn't have had.

I thank you for your contribution. I wish you'd come with a silver bullet, but apparently you didn't.

**Ms. Karen Hogan:** If I may, Mr. Chair, I will leave you with this. It's to motivate that consensus is needed. Once the ships are in our Arctic, it's too late to say, "Oh, there's a ship in our Arctic. What should we do about it?"

It's that need to recognize what our Canadian Armed Forces need to protect us domestically, but also to meet our international commitments.

• (1645)

The Chair: Indeed. Thank you for that.

With that we will suspend, re-empanel and move on.

• (1645)		
,	(Danas)	
	(Pause)	

• (1650)

**The Chair:** We have with us Professor Lagassé from Carleton University and Professor Anessa Kimball from Université Laval, who are no strangers to the committee.

Both of you are experienced before this committee, so I will ask Professor Lagassé to start with a five-minute opening statement, and then we'll move to Professor Kimball.

[Translation]

Dr. Philippe Lagassé (Associate Professor, Carleton University, As an Individual): Thank you, Mr. Chair.

Thank you to committee members.

Today, my preliminary observations are based on 20 years of academic study of Canadian defence, as well as a decade of experience as an independent reviewer of the defence procurement process, first as a member of the Independent Review Panel overseeing the evaluation of options for the CF-18 replacement, from 2012 to 2014, and then as a member of the Independent Defence Procurement Review Panel, from 2015 to 2022.

[English]

In this latter role in particular, as a member of the IRPDA, I had the opportunity to review and advise three separate ministers on over 100 major Crown projects planned for DND-CAF and the Canadian Coast Guard as they made their way through options analysis. I have five interrelated observations to convey on defence procurement based on this experience.

First, there is a mismatch between our defence policy and defence funding.

[Translation]

Canada's defence ambitions are considerable. The defence policy objectives we have set for ourselves over the past 20 years would require a level of spending in excess of 2% of GDP. Unfortunately, our spending tends to be closer to 1.5% of GDP. The result is a structural deficit in the development of our capabilities.

[English]

Both governments and DND-CAF have contributed to this problem. Governments, be they Liberal or Conservative, want Canada to play an important part on the world stage, hence their embrace of ambitious policies, yet they have not been willing to spend on par with their ambitions. DND-CAF, in turn, need policy direction from the government to acquire the capabilities required to face the threats that we face. This leads DND-CAF to advocate for ambitious policies and worry about adequate funding later.

Second, our costing of defence procurements is undermined by a pervasive optimism bias. Capital projects are costed too early in the procurement process, before any serious work has been done on requirements. When requirements are developed and engagement with industry occurs, too many projects are discovered to lack sufficient funding, which leads to either delays or compromises in the quality or quantity of the capabilities that are ultimately acquired.

[Translation]

The Department of National Defence needs a more robust costing methodology that shifts from optimism to pessimism. In addition, the government must accept that the costs of some capabilities cannot be known in advance, and can only be realistically determined once the options analysis is complete.

Thirdly, procurement processes are too rigid and risk-averse to keep pace with technological change.

Our acquisition system is designed to minimize risk and ensure the application of robust safeguards and controls. Unfortunately, this means that the system cannot easily adapt to rapidly evolving technologies or changing operational needs.

# [English]

To ensure that the CAF has the latest and most relevant technologies in key areas, DND must be allowed to take greater risks and move more quickly. I note that this will lead to failures, errors and regrettable uses of public funds in isolated cases, but these are the trade-offs that we must accept if we want the CAF to be equipped with the right technologies at the right time in most cases.

As importantly, you as parliamentarians will need to arrive at common agreement that not every failure or error should be seized upon for partisan advantage. Without a bipartisan consensus on this issue, the procurement process will be not able to speed up or meet the ever-adapting threat.

# [Translation]

Fourth, the Department of National Defence and the Canadian Armed Forces are facing major capacity problems. You've already discussed this with the Auditor General, so I won't go into it in depth.

#### • (1655)

# [English]

I will only say, however, that increasing DND-CAF's capacity to manage procurement—the human side of the equation—cannot be ignored and must be better appreciated. We are asking too much of too few people. This is not a recipe for success.

Finally, Canada must continue to make transparency in procurement a priority. DND has made important advances in making defence procurement more transparent.

Of note, the defence capabilities blueprint now provides easily accessible information about where projects find themselves in the procurement system and what capabilities they are delivering.

# [Translation]

However, Canada still lags behind its allies, such as Australia and the UK, in providing detailed information on the financial status of the overall investment portfolio and the risks surrounding it, as well as on individual projects.

Canada should publish an annual report similar to the Australian and UK defence procurement reports, that is, one that provides an overview of portfolio risks, costs and updates.

# [English]

Thank you very much. I look forward to your questions.

The Chair: Thank you, Professor Lagassé.

Professor Kimball, you have five minutes, please.

Professor Anessa Kimball (Professor, Université Laval, As an Individual): I appreciate your invitation to speak before the standing committee today.

I invite you to join me in acknowledging that the land from which I offer these remarks is the traditional unceded territory of the Abenaki and Wabanaki Confederacy and the Wolastoqiyik.

As a scholar of international co-operation, my comments draw from ideas in the organizational management literature of public

administration and political science, the economics research on collective behaviour and political science work on institutions as political actors, and the institutional design of legal contracts, including my own work from 2015 on modifications to the U.S. defence procurement system undertaken throughout the Obama administrations with respect to contract design.

In that work, I offered a set of recommendations to Canada for defence procurement. In fact, I was pleased to see that one of the recommendations from said research was partially adopted when the government accepted my recommendation that Canada work to diversify the sources of its contract partners concerning major defence procurement projects when it purchased F-18 Hornets from Australia.

That recommendation was offered during a presentation on an expert panel in 2014. It then appeared in 2015 in a policy paper and finally in a cost-benefit analysis I provided to MLI on the interim purchase itself. It was the final recommendation.

I appreciate that it took three distinct occasions over a number of years to make that recommendation see the light of day, and right now, of course, we have purchased those items, but it's still a few years until full delivery and full integration into the force, which is expected for 2025. I think it's important to note that this took a decade, and I think we can improve this, so I'm going to offer five recommendations in the next portion of these remarks.

By way of introduction, the bureaucratic steps and processes required to procure equipment and assets to equip CAF and functionally defend Canada's territory could be described as an interlayered labyrinth of procedures and processes managed and implemented by various stakeholders across different agencies. These processes and procedures are sets of institutions and practices with the goal of ensuring transparency in the responsible use of funds and resources on behalf of the public through accountability to the electorate.

Institutions can also be interpreted as constraints to restrain actors, as well as obstacles to efficiency and speed. They may be unfavourable to the flexibility required by governments during crisis, which is needed to ensure CAF readiness. There is a trade-off between ensuring oversight versus speed in the face of a punctual crisis that may require defence force responses, and we saw this emergency procurement—in some senses—during the pandemic.

On procurement affecting CAF readiness, Canada has done a level of constraining itself, one might say, through the creation of institutions producing various trade-offs, delays and externalities; as an example, policies concerning defence industrial offsets complicate the production of defence goods it needs. This is market intervention meant to redistribute benefits. Other schemes are available to do this that are frankly more efficient. Canada is wasting time and resources and affecting readiness when it does that.

Its procurement process could be improved though modifying and even abandoning those industrial regional benefits, which I know would be very critical and not very popular. It is a distortion on the market and, frankly, it impacts the procurement process. There are effects and, essentially, it delays essential military and defence R and D products and projects. This speaks directly to readiness of forces.

When it comes to procurement from research and development particularly, a second example is Canada's DND innovation funding authority. In fact, one of the problems is that it has severe limitations in terms of what we call "other transfer authority". An OTA is essentially how we go about hiring these defence sector contractors and companies to produce the projects.

In the United States in 2016, there were various changes in an amendment called "OTA 815", an authorization amendment. These modifications made the process in the United States much more nimble, flexible and capable of managing with delays. I'm going to talk about a couple of these things, which Canada could adopt itself without very much work.

Basically, these OTA 815 amendments affected three parts of the legislation: the dollar thresholds at which additional approvals are required for OTA; what it means to be a non-traditional defence contractor, where they changed what it means to be non-traditional contractors and how companies can become available again to become non-traditional contractors; and certain aspects about transitioning from prototype development into production. I see this as very important for Canada, because this is where right now we have huge delays in what's going on.

# • (1700)

There are extra processes involved, and there are ways in which we can make procurement more nimble by doing various things.

Right now, for example, in the United States these changes mean that once a project has been approved for a certain amount, they can up those levels of approval into certain limits, as long as the initial contracting procedure was competitive. Those projects themselves—

The Chair: Professor Kimball, we're past the five-minute point, quite a bit past it.

**Prof. Anessa Kimball:** I'm sorry. I can come right down to the point.

The Chair: Okay, two seconds on your final point.

**Prof. Anessa Kimball:** Okay, I have two seconds. The first thing is that on the contracts themselves there needs to be a much greater follow-up in terms of how we restrain the two parties and ensure that there is actually good faith with respect to overriding the limits,

the financial limits, of the contracts. That could be done better, shared better.

Finally, one of the most important things is essentially that in the early parts of the contract there needs to be much more development, much more focus in terms of the timeline for the project. That is where those overages will occur due to uncertainties about technological development.

Thank you very much for your attention.

The Chair: Thank you, Professor Kimball.

Ms. Gallant, six minutes.

Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC): Ms. Kimball, the Prime Minister has told NATO that he has no intention of having Canada allocate 2% of GDP on defence. It simply doesn't translate into votes.

Has the sentiment of Canadians changed since Putin began his attack on Ukraine?

**Prof. Anessa Kimball:** I think it's very clear that 2% was an important guideline and focal target when we were talking about enlarging the alliance, and 2% has its use, but 2% in terms of thinking about how Canada allocates and what Canada gets out of that allocation is simply not very pragmatic.

Yes, I think it's important that this be a guideline, but in terms of what Canada can contribute, it does a lot without reaching 2%. Frankly, at 1.4%, the other essential thing is this is a value that is linked to the economic size. When you look around, Canada has a large economy, so for us to move that 2% in any way incurs much more spending.

**Mrs. Cheryl Gallant:** We have larger economies who far exceed the 2%.

What action has the government taken, Dr. Kimball, to avoid having to wait in line as a consequence of NATO members' critical defence needs in eastern Europe?

**Prof. Anessa Kimball:** In terms of waiting in line, I'm not sure if you mean waiting in line to get procurement, to procure the types of assets that—

**Mrs.** Cheryl Gallant: To procure the assets that several of the other NATO countries are trying to procure at the same time for use in Ukraine.

**Prof. Anessa Kimball:** Canada has tied its own hands with its procurement system in the sense that there are a lot of stakeholders who make the process very slow. If you look at, for example, the Polish procurement system and the improvements in the American procurement system, it makes it so that once you've had competitive processes in the beginning, you can keep things rolling and the finances coming in as long as the project is making progress.

Right now, essentially, there are a lot of returns in the process, which bring in those delays.

When it comes to the equipment itself, I think it's very clear that Canada has to recognize it simply doesn't have security threats that are as acute as some of the European partners have. The United States and other countries are going to send those military resources to those countries first.

• (1705)

Mrs. Cheryl Gallant: Thank you.

Dr. Lagassé, 3-D printing seems to be the future and is transformational with respect to supply and procurement. Do you see Canada taking this view and implementing any aspects of this?

**Dr. Philippe Lagassé:** At this stage, I would consider that as still experimental from a defence procurement point of view. It may be introduced when it comes to certain types of spare parts or other things of that nature. Really, at the end of the day, it's for industry to demonstrate that it can supply things more quickly and still meet the requirements.

**Mrs. Cheryl Gallant:** Dr. Lagassé, could we make the process faster and more efficient by reducing the number of departments and agencies involved in procurement?

**Dr. Philippe Lagassé:** I don't believe that's the key component, and if we were to move to a single agency now, while we're trying to recapitalize the force, that would likely be disastrous, to be quite frank.

**Mrs. Cheryl Gallant:** Okay. Dr. Lagassé, would getting DND and CAF to reduce the number of specifications, or modifications, they're seeking in procurement be an effective means of speeding up delivery?

**Dr. Philippe Lagassé:** Yes, if we were to try to reduce the amount of Canadianization that we do for equipment, that would speed things up.

I will note, however, that one of the reasons we Canadianize is that we buy so rarely that we try to put everything we can within a platform, so we put that onus on ourselves. If we were to say, as a matter of course, that we would buy more often, but we would buy simpler, there again—and this is what I was hinting at—it's having to take risks.

Mrs. Cheryl Gallant: With respect to industrial and technological benefits policy, are the primary costs and benefits worth the effort?

**Dr. Philippe Lagassé:** I think, as the Auditor General pointed out, this ultimately comes down to trade-offs in society. Do you want to use defence dollars squarely to equip your military, or do you see it as a jobs program as well? I think it's fair to say we tend to see it as both.

**Mrs.** Cheryl Gallant: Has the government paid sufficient attention to the world view about the most appropriate military force structure since it came into power in 2015?

**Dr. Philippe Lagassé:** It did a significant review as part of the 2017 defence policy. The department and the CAF offered the government various views. As a number of people have written, this is really building on the CFDS policy of 2008.

On the fundamentals, we're generally in agreement. The question becomes whether we are funding adequately for that. That's where I would have concerns.

**Mrs.** Cheryl Gallant: Does it explain some of Canada's current procurement troubles?

**Dr. Philippe Lagassé:** Absolutely. If you try to have a defence policy that creates a force that requires 2% of the GDP to fund it adequately and you only have 1.5% of GDP, you're going to run into structural deficits around the creation of that capability.

**Mrs.** Cheryl Gallant: Does Canada's military have the capabilities to respond to a conflict abroad at any given moment?

**Dr. Philippe Lagassé:** It depends on the manner in which we can respond. It would really be more a case of putting up a flag as part of a coalition in some cases. In other cases, we might be able to commit more. It really depends on the nature of the conflict and the crisis

The Chair: I'm sorry, Cheryl. That's it. I was trying to get your attention.

We'll go to Madam Lambropoulos for six minutes, please.

Ms. Emmanuella Lambropoulos (Saint-Laurent, Lib.): Thank you, Chair.

I'd like to begin by thanking our witnesses for being here to answer some more questions.

I'm going to start with Mr. Lagassé. You spoke a bit about Canada's ability to procure some things better domestically than others, about how some industries are stronger than others within the country, and that we would be better off from a defence perspective procuring certain things outside.

It's been brought to our attention, or at least to mine, that even with things we are strong in and where our industries are world-renowned, we don't necessarily give top priority to our own companies.

I'm wondering if you think there's any way to increase domestic capacity, at least by focusing on the areas we do have strengths in, and figure out a way to prioritize our own when we are able to. Could you speak to that in any way and go into a little more depth?

**Dr. Philippe Lagassé:** As we saw with the shipbuilding strategy, you can make a policy that you're going to build something within Canada, but if you try to acquire other capabilities writ large, a challenge you're going to face is that you have to convince industry to invest in something that you're going to buy a very limited amount of. They then need to sell it internationally. As we've seen when it comes to foreign military sales to various regimes, we then get concerned about where we end up selling these things.

You have to convince industry you're actually going to buy on scale for them to make the investment worthwhile, which, given the size of our military, we simply can't do.

It's good to buy Canadian when we can, but Canada can't produce everything. It has to produce something that can compete on a global scale.

#### **•** (1710)

**Ms. Emmanuella Lambropoulos:** How much of a role do you think the Canadian government can play in promoting some of the things Canada produces abroad in terms of defence, including with our NATO partners or any of our allies? I know they need that interoperability.

In what way can the Canadian government play a role in ensuring some of our own products are being pushed or at least promoted out there, so we can use our own stuff and be the leaders in that one way?

**Dr. Philippe Lagassé:** We already do that with the Canadian Commercial Corporation. The CCC has a program of promoting Canadian defence industries and defence goods. Here again, though, it is a question of how much you want to invest in particular capabilities.

I'll give an example that is maybe not well known. For instance, the upgrading of our Halifax-class frigates was a successful upgrade that was then subsequently pursued by the New Zealanders. We're actually quite good at this.

It's just a question of recognizing that we can't do it across the panoply of defence capability. We're very good in certain areas, and the CCC and the Government of Canada do promote those industries.

**Ms. Emmanuella Lambropoulos:** Okay. I like what you're saying. However, having spoken to some of these industries, it seems there's a lack of communication between what the needs are and what they could potentially produce. I think maybe filling in that gap would potentially be able to help with both.

I'm wondering if you could tell us about the procurement processes in other countries. What other countries are doing this better, especially in really pushing their own and getting their own domestic capacity up?

**Dr. Philippe Lagassé:** If you really want to see an example of what a truly nationalized defence procurement system is, look at a country like France. France will invest heavily in maintaining its own domestic defence industry—and at great cost, I would add. It sometimes leads to some illogical practices. For instance, some years Dassault will produce only a couple of Rafale aircraft. It's just to keep the production line going, but they keep it going.

You have to ask yourself as a Canadian—we had the Auditor General here—if we would accept subsidizing a defence industry producing one or two pieces of equipment just to keep the line going because we think it's important nationally to maintain that industry. That's always an option, but to be quite frank, we're too capitalistic for that.

**Ms. Emmanuella Lambropoulos:** Would you say that maybe France is in a different situation from Canada in terms of its geopolitical location? Do you think maybe Canada doesn't necessarily need to go that far in that respect?

**Dr. Philippe Lagassé:** Well, as we're seeing with the ships and the shipbuilding strategy, you can make it a policy that you will fund the development of Canadian industry and that you will buy a certain amount from Canada. That comes with cost increases. It comes with political pressure to keep those lines going. It comes with, in some cases, a higher cost and a reduction of capability, but ultimately, you build the ships in Canada; you get the expertise and you know that you can rely on that yard.

All of this comes down to trade-offs. Are we willing to do that beyond ships? That is ultimately the question that we have to answer.

**Ms. Emmanuella Lambropoulos:** Thank you for answering the questions.

The Chair: Thank you, Ms. Lambropoulos.

[Translation]

Ms. Normandin, you have the floor for six minutes.

Ms. Christine Normandin: Thank you very much, Mr. Chair.

I will first turn to professor Lagassé.

You've said that national defence policies and funding for the department are poorly aligned and that, given the needs, spending by the department should be more than the current 2% of GDP.

Yet the Parliamentary Budget Officer told us last week that not all of the Department of National Defence's budget has been spent and that the projected value of unused funds for 2023-2024 stood at about \$4 billion.

How do you explain the fact that, on the one hand, amounts earmarked in the budget are insufficient and, on the other, funds remain unspent? What exactly is the problem?

## **•** (1715)

**Dr. Philippe Lagassé:** There is a significant difference between the amount of expenditure required to maintain and keep resources up to date over the long term, and the ability to spend. The fact that we haven't been able to spend the allocated funds stems from the fact that we haven't spent enough beforehand to obtain the personnel and institutions needed to spend the money.

So you have to build some capacity within the department. When budget cuts were made in the 1990s, which had the effect of reducing staff by 30%, it reduced the ministry's spending capacity at the same time.

So a policy was adopted that required accomplishing an awful lot of things, but the institutional capacity to spend the money on those things was not there. In a way, even not being able to spend money is a reflection of previous budget cuts.

**Ms.** Christine Normandin: So the fact that the budgeted amounts that remain unused are constantly increasing, from year to year, shows that the structural problem is also getting worse. Is that correct?

**Dr. Philippe Lagassé:** If we can't invest in the staff whose job it is to spend the earmarked amounts, long-term costs will simply rise. In other words, not spending budgeted amounts or delaying the purchase of equipment has an impact on the final cost of the purchase, which will ultimately be higher.

Ms. Christine Normandin: Thank you very much.

In your opinion, cost estimates are generally too optimistic. You've suggested that we adopt a better method of calculating costs.

Having said that, I'd like you to explain why. After all, we need to correctly diagnose the problem in order to use the right remedies. What is the cause of this overly positive view of the costs?

**Dr. Philippe Lagassé:** It's because we like to have very ambitious defence policies, and the military likes to have defence policies that tell it to buy the equipment it needs. As a result, politicians, the Department of Finance and the armed forces all have an interest in ensuring that costs are very low, in order to have policies that allow them to buy equipment. However, at the end of the day, you're dealing with the real cost in the long run.

In short, everyone has their reason to be optimistic about costs.

**Ms.** Christine Normandin: I'd like to come back to something else you mentioned, and draw a parallel between it and something Professor Kimball said. You talked about how Australia and the U.K. are transparent in their procurement policies and publish annual reports. However, Professor Kimball said that oversight is often an impediment to procurement speed.

You mentioned the need for transparency and reporting. But could that become an obstacle to fast procurement?

Then I'd like to hear Professor Kimball's opinion on this aspect.

**Dr. Philippe Lagassé:** Studies are already being done within the government. We already have the data and the analysis. It's just a matter of providing them to the Canadian public and making sure to involve the Office of the Auditor General in the process to validate everything.

**Ms.** Christine Normandin: Could increased monitoring slow down the procurement process?

**Dr. Philippe Lagassé:** Oversight already exists. If we're more transparent, but you decide to make it a scandal or a crisis, then the process will be slowed down.

I understand the reluctance to be transparent, but at the end of the day, the only way to ensure greater trust in the system is to be more transparent. We're already doing the work and the analysis.

**Ms. Christine Normandin:** Professor Kimball, would you like to comment?

**Prof. Anessa Kimball:** I would add that as soon as several stakeholders are involved in the process, we see that the timeline gets longer. That's where inefficiency comes in.

It's a matter of compromise. As researchers, of course we want transparency and greater access to information. We're always complaining about the lack of information. The mere task of obtaining access to National Defence budgets is not that easy. I myself have worked on National Defence budgets and have just published a book on the subject.

Again, we want to conduct the analysis, but we're limited when we don't have access to financial data, timelines and that kind of information. It's very difficult for us to assess which options are good as compared to others.

Let's take the example of a problem related to the acquisition of fighter aircraft. We've seen how it takes longer to solve this kind of problem in Canada than in other countries. There's probably information in our system, but to know what is going on, we need more access to data and more comparative analysis.

(1720)

Ms. Christine Normandin: Thank you very much.

[English]

The Chair: Thank you, Ms. Normandin.

Ms. Mathyssen, you have six minutes.

Ms. Lindsay Mathyssen: Thank you to the witnesses.

I think this might be a question for both of you. Ms. Normandin was talking about—and you commented on it before—the transparency, slowing things down, time restraints and so on.

Can you talk about how they have been impacted, as we move from an open-source contracting position to a sole-source one?

Certainly, there is give-and-take, but is it the same kind of concern—not complaint—in terms of those timelines?

Mr. Lagassé, you could go first.

Dr. Philippe Lagassé: I'll give a simple example.

For instance, if what we've seen comes to fruition and the government moves forward with the sole-source acquisition of the P-8A for the CMMA, one of the best ways to ensure that there's understanding and trust in why that decision was made is far greater transparency about the requirements and why that decision is made the way that it's made.

If there is a lack of transparency around sole-sourcing, as we saw with the fighter jets, that breeds political controversy, and that ultimately breeds delay. At the end of the day, if you cannot explain why you have done what you've done, and if you simply tell the public that this is what you're doing....

When I was on this panel previously, my mantra—and it continues to be my mantra today—was "explain things". Don't tell. Explain to us why you're doing what you're doing, as opposed to simply announcing it. That's what breeds distrust, and that's what creates delays over the long term.

Ms. Lindsay Mathyssen: Go ahead, Professor Kimball.

**Prof. Anessa Kimball:** I would say for sure that the people who are drafting these contracts with the defence sector need, before the negotiations, to have a better understanding of how these risks arise. The fact is that they can actually integrate appropriate responses within these agreements themselves, for example, with penalties, cost sharing and flexibility.

The French have something very interesting, which is pre-contractual risk assessment. There's a financial obligation under which the government and the contractor agree that they're both watching for overages and they're both going to take responsibility if there are overages.

You really have to have a shared sense of responsibility and transparency for this to work, but it can work and it's actually helped them streamline their defence procurement and prevented overages on some major projects.

Canada can do some little things. It needs the defence sector to be more open to designing better contracts. It's about the fact that those contractors have private information. How do you get over those structural issues? You need better design contracts. Solutions are available, but Canada just doesn't put those into practice.

**Ms. Lindsay Mathyssen:** In terms of that transparency, an argument could be made by other countries that if you go with a sole source—even if you're open about that and provide explanations as to why—they may be disillusioned by that entirely and just not want to bid at all. Is that a potential concern?

**Prof. Anessa Kimball:** I think the other thing is that the public doesn't understand that the defence market is not a normal, classic market, according to Adam Smith, in which prices are based on supply and demand. We have this very bizarre market.

When we talk about all these things, our abstract conceptualization is of a market that doesn't exist with respect to defence. We need to change our thinking so we understand this market and we can react appropriately to it. Frankly, a lot of the recommendations we see are based on this perfect market that is not the one that in defence procurement we actually work in.

That's another thing: Frankly there's not very much reflection about what that means. Economists have thought about this quite a bit.

**Ms. Lindsay Mathyssen:** In the previous panel, I asked the Auditor General about the Americans going through the investigations on exorbitant costs. There's the fact that certain overcharges have been made by companies that would be within that streamlined sys-

tem—which, I think, you were talking about, Professor Kimball—and would be trusted defence contractors. Some of those profits are hiked up from 40% to 4,000%.

How do we ensure that we avoid that?

• (1725)

**Prof. Anessa Kimball:** I just want to be clear: What I was talking about in that instance was not the large defence contractors that are changing the market. Those changes to OTA authority were about small businesses.

This is the market Canada wants to be in. We're not Raytheons or Boeings. We don't have any of those. That's the essential thing. Those changes were about permitting access for the level and size of firms that we expect Canada to have competing in the market.

The issue in the United States is that you have these huge monopoly actors that shape the market in ways that are not normal. You can react to this with better contracts and more responsible ways to engage those actors.

Maybe I wasn't clear. For sure, there's more and increasing attention paid to the fact that there are major players distorting the markets. Frankly, some countries like France and Australia are a bit more clear and transparent on how they deal with these things than Canada is. There's been a bit of ignoring that it's going on.

The Chair: You're pretty well out of time. Thank you.

Mr. Bezan, go ahead for five minutes.

Mr. James Bezan: Thank you, Mr. Chair.

I want to thank both Professor Lagassé and Professor Kimball for their recommendations. I think having recommendations come forward from witnesses is important. I just ask that you provide those in writing to the committee, along with your reasoning. They're something we can actually take a hard look at.

Both of you are saying, in some cases, the same thing but in a different way. It's on being nimble versus being too rigid on procurement and contracts.

Professor Lagassé, you talked about having more of that senior management that we're missing out on. Are you talking about having that skill set within CAF itself, having it within National Defence or having it be inter-agency?

**Dr. Philippe Lagassé:** Let me break it down. Within the CAF, one of the challenges you have is that the requirements are being written by people who are cycling through postings fairly rapidly. The staying power of those people, given the CAF rotation system and how they are reposted after a certain period of time, removes the memory even from individual projects and often in the past has resulted in situations where there isn't that good understanding of how the project is tracking over time. That's something to be aware of in terms of how the CAF sets requirements.

At the upper levels in terms of the *matériel* group, you simply need people who are experts in this, and you need to hire more of them. As we all know, any sector of the economy is the same. These aren't people you take off the shelf and just put into a position. It takes years to train these individuals. As some of the members mentioned earlier, you're competing with many other industries. To be frank, this isn't simply a procurement problem; this is a cyber problem. This is going to be a problem when it comes to training personnel, maintenance personnel. Whatever it is, we are facing a wall when it comes to the human resource challenges in defence, senior management, technicians and project officers, even within the CAF.

**Mr. James Bezan:** There is some of that we can go and hire. For big projects, we're going to need some really good skill sets, so there should be somebody riding herd on surface combatants and somebody riding herd on the F-35 purchases. These are long-term procurements. We just can't have the deputy minister looking at this on a Friday afternoon and saying we'll keep proceeding. We need somebody making those decisions slightly lower down but on it 24-7.

**Dr. Philippe Lagassé:** I'm not worried about those big projects. CSC and future fighter have tons of people dedicated to them. I can tell you only how many years the air force committed to future fighter and the resources that were put in it.

The bigger problem is the smaller projects that don't get the same level of attention. Those projects are ones you may never have heard of, like GBAD, DRMIS and some of these other projects in the system. You want to be sure that you have people there to shepherd them through the process, and that they have the time and dedication to make them happen.

The big rocks—

**Mr. James Bezan:** On those smaller ones, if we want to drill down and make sure they move through more rapidly but still have that skill set, should we then make sure that certain...? Right now I think the threshold is that DND can spend up to \$50 million without having to go through Treasury Board.

Should those thresholds be increased, and should those still be capsulized within the Department of National Defence rather than spread out over Treasury Board or Procurement Canada?

**Dr. Philippe Lagassé:** Raising those thresholds and, similarly, delegating some decision-making to lower-level individuals within the procurement process is the only way you're going to speed up. It's the only way you're going to be able to meet the pace of change that's being set.

Again, that comes with risk. We need to be able to accept that some mistakes will be made, and we can't allow every mistake that's made in good faith to blow up; otherwise, we end up back with the future fighter, and we end up back with those scandals. We're always going to get back to step one with every change in government if every single small problem that occurs leads to scandal. We have to accept, if we want CAF to take risks and we want them to go faster, that on occasion there will be—

• (1730)

Mr. James Bezan: I agree with you.

Professor Kimball, you were talking about comparing our procurement system to those of the United States and other countries.

If you look at what we have here in Canada, are we using all the tools in our tool box, like the Defence Production Act? You've already mentioned contracts, but how do we go forward to streamline the process? What role does our domestic industry play in making sure that we have sovereign capability during times of conflict, so that we aren't getting moved to the back of the line?

The Chair: Answer very briefly, please.

**Prof. Anessa Kimball:** Canada needs to do a bit of prioritizing in terms of what its essentials are. We talked a little about the types of projects that get a lot of focus, these big end projects like joint strike fighters, but other things, like equipping the soldier, don't get very much focus.

I don't know how long I've listened to female forces members complain about how poorly the uniforms fit and how they're really lacking the various necessities they need to do their job. That's readiness. Readiness means we have to go out in the field.

I think that's one thing that's very important. There needs to be a reconceptualization when we look at procurement, to say, "Okay, if we want the soldier to fight, they need this kit, and this is how we need to prioritize it. When we do NATO and NORAD, these are the capabilities that are required."

I know that there is some thinking going on about what different packages would look like for crises and missions in a more systematic, conceptual way. I think it's important that Canada think about that when it thinks about procurement down the line.

The Chair: We're going to have to leave the answer there.

Thank you very much.

Mr. May, you have five minutes.

Mr. Bryan May (Cambridge, Lib.): Thank you, Mr. Chair.

My first question will be for Professor Kimball.

Previously, it was noted that since Canada has a relatively small industrial defence base, procurement may be challenged by focusing too heavily on purchasing domestically. Do you agree with that?

**Prof. Anessa Kimball:** Yes. There's a bit less focus on purchasing, but I think one of the things Canada doesn't do well enough is thinking about how it can go into R and D with other countries in a collaborative way and how it can work in the line towards producing those things that are sold. If you look at what Canada does, it does not do very much R and D that leads to its own projects.

What is interesting now is we have Finland and Sweden joining NATO. These are countries that share Arctic space with Canada and that will definitely have some of the same needs for procurement. This is where I would say, yes, these are countries that have better and more efficient procurement systems. These are ways Canada could get more by putting in less of an investment, but also secure a future line of assets. This is the type of stuff I think Canada can do better and should do better in the next five to 10 years.

Mr. Bryan May: You kind of touched on my next question.

Maybe you can elaborate a little on what you were talking about there, but how can Canada take steps to better balance that need for efficient, agile procurement with the goal of increasing domestic capacity?

**Prof. Anessa Kimball:** I think it comes down to looking at the types of defence industrial sectors where Canada right now has key capabilities and deciding that these are the ones we want to foster, these are the ones we want to develop. We can look around and say, these are sectors that are maybe complementary to sectors that other partners might have, and really think a bit more transversely about what it can do with others to find a niche in a market where it can say, look, Canada and X countries do this very, very well, and these are going to be the go-to countries.

Right now, Canada doesn't really have an identity like that, though it probably could, because when people think about Canada, they think about the Arctic; they think about the north and they think about the cold weather equipment. Why are we not on those lists and the Swedes and Norwegians are? These are questions that have a lot to do with how Canada has organized itself and how it's prioritized the types of things it invests in.

• (1735)

Mr. Bryan May: Thank you, Professor.

Professor Lagassé, with several departments involved in defence procurement and layers of policies and process, do you have any recommendations for how procurement can be more streamlined, agile and responsive to emerging military requirements? More specifically, can you identify where regulations and process may be doing more harm than good?

**Dr. Philippe Lagassé:** You're all familiar with the difference between vote 1 and vote 5 money. As soon as something engages vote 5 spending, it engages all the processes that are required for a capital acquisition. That means when you're trying to buy something—let's say like a new computer system—you're trying to go through a 15-year process. You're setting the requirements within the first five years, and then you're buying something 10 years later. That's not going to work.

You need something between vote 1, which is like everyday spending, and vote 5, which is investment spending, for high-level technologies and things that have to be procured on a rapid basis. You need almost a middle category of money where it is understood that it is spent with rapidly developing requirements and spiral requirements, such that every year or every time you're buying something, you can buy the latest thing when you need it. Right now, this categorization that we have between vote 1 and vote 5 doesn't allow for that flexibility.

**Mr. Bryan May:** Professor Kimball, I'll ask the same question to you. Do you have any thoughts on that?

**Prof. Anessa Kimball:** In terms of the details of the process, I would not have much to add other than what my colleague said, because he understands the process on the inside far better than I do in terms of timing. I would say, like I said, comparatively it's a long process for things that we see produced more quickly in other countries. As somebody who looks at these things more broadly, in terms of internationally, I keep having questions and not finding very many responses.

Mr. Bryan May: Thank you to both of you for appearing today.

The Chair: You have two and a half minutes, Ms. Normandin.

[Translation]

Ms. Christine Normandin: Thank you very much, Mr. Chair.

Professor Kimball, I'd like to pick up on something you mentioned, which is that contracts should be better designed. For example, there should be better cost-sharing if deadlines are exceeded.

To what extent do certain things get in the way? When it comes to national security and intellectual property, for example, some information is hidden. This gives the impression that companies are being given a certain leverage when negotiating contracts.

Am I wrong, or are there still a number of challenges to better contract drafting?

**Prof. Anessa Kimball:** Generally speaking, issues related to classified information are not expressly part of specifications or the way contracts are drafted. Things can come up once the process is under way. Often, it's part of the contract terms and conditions. It's the next step; it's a bit like implementing the contract.

In terms of the framework and structure of the agreement with the company, nothing in there is classified. That's general information. We can add a host of other clauses designed to protect Canada, but also to share costs in the event of delays or changes.

For example, we know that Canada has changed the requirements for certain programs. So, Canada could agree to assume the costs of any changes it decides to make in the future. It would accept the responsibility, because we know that this delays the R and D process.

So there are ways of making changes and accepting responsibility for them. This doesn't have to become a big media show, but it's about taking responsibility and acting transparently.

**Ms.** Christine Normandin: What I understand is that we should quickly establish guidelines, for example for sharing responsibilities, right from the start of the contract-signing process. I'm thinking in particular of the F-35 file, where we had the impression that the benefits for Canada and the companies were going to be negotiated later. That could have been negotiated upstream, could it not?

**Prof. Anessa Kimball:** Yes. It's important to at least have some ideas and to establish expectations for sharing the responsibilities. I am currently analyzing a pile of other contracts, and that is what I see very clearly.

Of course, there are strategic reasons why the Americans and others don't want to include such clauses. However, when you sign a contract, you're in a negotiation process. So we have to say that we want this to protect ourselves, and that we won't sign a contract without some protection against certain risks. These are things that are added to contracts in France and England, although it's a little less popular in England than in France. We're seeing this more and more in Australia, too.

• (1740)

[English]

**The Chair:** We're going to have to leave it there.

Ms. Mathyssen, you have two and a half minutes plus 10 seconds.

Ms. Lindsay Mathyssen: Thank you, Mr. Chair.

Professor Kimball, we were talking about the 2%. It's that arbitrary number that everybody seems to focus on. However, you mentioned of course that there is that qualitative approach that we don't take. I would really love for you to expand on that, on the issue you brought forward, in terms of women not having the equipment they need, which fits their bodies and protects them adequately. There was a story that just came forward about our troops in Latvia having to buy their own helmets, because they didn't have what was necessary to keep them safe.

Can you expand on, and talk about, how we work that into a qualitative approach on the spending we do?

**Prof. Anessa Kimball:** First, on the helmet story, I think it has been shown that it might not actually have been factually correct when it was released to the media. I'm not sure if that's actually.... Anyway, I would put a question mark next to that.

When it comes to the idea of equipment and the fact that.... I'm not only talking about women but also talking about LGBTQ people. The fact that we want to recruit in our military forces, and we don't give kit...we don't have options for people who are.... I'm somebody who is non-binary, so I would have a huge problem in our military forces, evidently. That alone is a whole other story that I could speak to, because I work a lot with the defence pride network, so I know a bit about what those individuals face in trying just to defend our country.

On the part of the kit that's for women, one thing that's very clear is that this is an industry dominated by men when it comes to everything from prototyping to how we test things. At the latest CANSEC conference, there was one female mannequin out of all

the mannequins that were showing defence equipment. I think that says a lot about the sector in general.

I know, for example, there are some countries that are thinking about this and that have put money towards developing resources for women in ways that are much more impressive—for example, Danes. If you're pregnant and you're in the forces, you are not destined to wear a uniform that is one of the ugliest things on the planet and that makes you look like a tent. Some of these things are pretty important when it comes to just creating forces that are representative of society, and there is also this recruitment piece that is extremely important for the future of the forces.

The Chair: We're going to have to leave it there.

Ms. Kramp-Neuman, you have five minutes.

Mrs. Shelby Kramp-Neuman: Thank you.

Dr. Lagassé, my first question.... Is it fair to say that DND needs more agility when it comes to Treasury Board regulations and procurement?

Dr. Philippe Lagassé: Absolutely.

**Mrs. Shelby Kramp-Neuman:** You spoke of efficiency's being the key and of the lack of continuity to shepherd projects through. Could you elaborate on that point a little?

**Dr. Philippe Lagassé:** Well, one of the challenges you have when you're dealing with large projects is that the current posting system places people from operational postings into capability development within the forces. There's nothing wrong with that. On a conceptual level, you're taking people who are just operators, and you're putting them into the development of requirements. However, then, when you add on top of that even the senior levels of the forces that will change rapidly over the life of a project, you can imagine how, as people change, requirements can be rethought. There are different ways of looking at the problem. That, therefore, leads to projects where you basically have turnover within the project when you're trying to get it through.

As much as I respect the philosophy behind the posting system within the military, we have to recognize that that itself can cause delays, because you're changing the people who are effectively responsible for telling you what you need to buy.

**Mrs. Shelby Kramp-Neuman:** Earlier, in an answer to one of my colleagues, you mentioned how we're lagging behind our allies. Could you speak to what we're doing so wrong that other countries are doing so right?

**Dr. Philippe Lagassé:** I don't think any country is doing anything so right when it comes to procurement, but at the very least, what they're doing is being far more transparent with their public and their parliaments about why they're doing what they're doing and how they're trying to do it.

As many of you know, the Canadian tradition.... We have a culture of secrecy here, and we have no idea how budgets are spent. Even your work is constantly hampered by a lack of information about budgets.

One other point is that you should all have access to classified information to do your jobs. You do not need security clearances within the executive to do so. You are members of Parliament, and you have the privilege of that information. You can be sanctioned by your houses if you choose to use that information inappropriately. It is essential for you to do your work, even when it comes to something like procurement. You should be able to have access to classified information to know exactly where projects are, what they're doing and where the money is being spent. That should be non-negotiable.

I can't believe we're not there yet. Just look at your colleagues in Australia. A publication just came out in February saying that their intelligence committee has to be replicated for defence, because if you're going to do something as serious as AUKUS, you need members such as yourselves to be cleared for and have access to that information.

#### (1745)

## Mrs. Shelby Kramp-Neuman: Thank you for that. Bingo.

Back in 2010, you spoke about the importance of Canada's military capabilities to respond to any given conflict, sort of like an insurance policy. The higher the risk you have, the more you need to contribute to defence numbers.

Given the current state of conflict abroad, do you believe that our current capabilities would allow us to respond as needed if the situation were to escalate?

**Dr. Philippe Lagassé:** It depends on the situation, but generally speaking—the chief of the defence staff has pointed this out—we are very stretched as it is.

Now, there was an ambition within the 2017 policy to have concurrency of operations, for us to be able to do two major operations at once. We are strained to do this. We simply do not have the personnel to do this. Our recruitment and retention numbers are simply not where they need to be to make that possible.

Let's leave aside equipment for a second. If you don't actually have the people to use the equipment over the long term, that equipment is useless. Capability is not simply equipment. Capability is people to use the equipment, people to maintain the equipment, people to prepare to buy future equipment. If we are so solely focused on the hardware, we lose track of the overall picture.

As my colleague, Professor Kimball, pointed out, if we are not making every effort to include everybody who can possibly join the forces and make this a career that they want, we will not be prepared for anything that's going to be thrown at us in the future.

**Mrs. Shelby Kramp-Neuman:** I couldn't agree more. Basically, if we don't have people, the readiness problem completely remains. There's no argument there.

Let's go back to your last answer a few moments ago. I really believe in the importance of Canada's being proactive instead of continuously reacting. Could you answer, with regard to AUKUS, whether we should be a member?

**Dr. Philippe Lagassé:** If I were Australia and the United Kingdom, and Canada said, "I would like to join AUKUS," I would ask, "What are you bringing to the table?" If you have nothing to offer

and you're a smaller member, why should they offer you anything? The United States might be willing to, but why would the Australians or the British give up contracts to Canadian companies? Why?

The Chair: Thank you, Ms. Kramp-Neuman.

Go ahead, Mr. Sousa.

Mr. Charles Sousa: Thank you.

I want to build on that point, actually. I'm going to ask Dr. Kimball first.

We often hear about the fact that Canada may be lagging behind in this 2% commitment, especially from other NATO countries rather large NATO countries with huge economic benefit from some of this activity.

What is the trade balance between Canada and other NATO countries with regard to the military industry? Do you have a sense?

**Prof. Anessa Kimball:** Well, of course, there are only about six or eight militaries in NATO that are militaries one would consider to be sufficiently capable—the ones that are looked towards. To this, we would add the Finns and Swedes, who are coming in as other extremely capable militaries. One thing that will be extremely important is going to be.... I think Canada can have a real role in helping integrate these two countries. Much more clearly, Canada should be inviting them to participate in the battle group it leads, for example. This could only help Canada, because we know it already has some pressures there.

Obviously, we're looking to the big three: the French, the Germans and the U.K. Those are all militaries that are a similar size. Where you have similar levels of investment would include militaries like the Dutch and the Spaniards. When you look at NATO, one thing that's extremely clear is this: Canada is the only country that is not a top-five contributor leading a brigade. It's doing something—with a much smaller economy—that is equal to everybody else. When people say Canada is not pulling its weight, that is simply false.

Canada is also the country leading a brigade that has the largest variation in capabilities. If you look at all the other groups, those countries on average have a higher level of capacity. Canada has the most partners, the most languages and the broadest level of capacities to deal with. Frankly, it's putting forth something with a much different set of tools from everybody else and still managing to pull it off.

The question shouldn't be, "Why isn't Canada reaching 2%?" The question should be, "How is Canada doing as well as it's doing at 1.39%?"

#### • (1750)

**Mr.** Charles Sousa: I want to ask you, Doctor, if I have time, to build on that very point.

You have some of these substantive countries limiting their 2% of GDP, which includes military industry. Canada's not benefiting from exporting its military. Can you give us a sense of whether or not we are, effectively, a positive contribution to the cause?

**Dr. Philippe Lagassé:** Canada is one of what I would call the "fighting few". There are many countries—as we saw in Afghanistan—willing to contribute, but they're not necessarily willing to fight, or to fight without caveats. We are willing to do a number of things other members aren't willing to do. We are willing to take risks and take on operations that others aren't. If you look at the current crisis, we helped train the Ukrainian forces that are doing the defence of their country. That was a key contribution we made. None of this is to denigrate what Canada actually does and the amount we place on our forces.

What I will say, though, is this: The Canadian Armed Forces always seem to manage, in spite of how few resources and how little support they get. Eventually, they will snap. There will be a crisis and they will fail. That is the only moment in which real change, perhaps, will finally occur. I don't think many of us appreciate the extent to which the department and the forces go out of their way to avoid failure at all costs, and the strain that puts on people. That can be sustained for only so long, as we're seeing with the procurement system. You can push people only so far before the system starts to eventually collapse.

Mr. Charles Sousa: Do you have any examples of things that were done effectively—in terms of procurement in the past decade—that we can take lessons from?

**Dr. Philippe Lagassé:** There are tons of procurements that move forward that are fully successful. We just never hear about them. I would say a good 75% of procurements move through. It's the big rocks that get a lot of controversy and generate a lot of attention. The reality is that we buy quite a bit on time. It's not necessarily on schedule, but we do buy it.

We focus so much on the negative that it leads to what Professor Kimball noted. I'm even a part of this, in a sense. When we focus only on the failures, we end up putting more and more process in to control the failures. We have built up so many controls around the process that there's now no room for speed. Every single time there's a scandal or problem, our solution is always to pile on more oversight and more controls.

The problem in Canadian defence procurement is not the lack of oversight. There is, in a sense, too much of it. I say this as somebody who was involved in that oversight.

**The Chair:** Dr. Kimball, [Inaudible—Editor]

**Mr. Charles Sousa:** The chair is being very mean, Dr. Kimball. I really wanted to hear from you.

A voice: He's crotchety.

**The Chair:** Yes, I'm crotchety, cranky, etc. At five minutes to six, I might be persuaded to hear, for a moment or two, what Professor Kimball has to say and to finish off our conversation.

Professor Kimball.

**Prof. Anessa Kimball:** I would close by saying that obviously defence procurement is a complicated labyrinth of an animal.

It's clear that there are various recommendations that can be implemented that would help facilitate clearer contracts and more transparency. There are ways in which data could be more available to scholars, so that we could help to evaluate this better.

At the end of the day, it comes down to people who are in uniform who need to be ready, and to how we recruit and retain those people. In that respect, one thing that we haven't talked about very much at all is the education and the professionalization aspect, and how that is essential to all of this.

This is also an area where, frankly, there is a lot of work to be done. There are a couple of institutions that have monopolies on defence education, and I think we need to think about that in a different way. Other countries are doing it differently.

I would leave it by saying that one of our procurement problems is in the education line and getting people psyched about defence and about contributing to defence.

The next big challenge in procurement is going to be green defence procurement. We don't even know how we're going to do that. We have to do that in the next five to 10 years.

**(1755)** 

**The Chair:** Thank you, Mr. Sousa, for manipulating the clock like that. It was very clever of you.

This is an extraordinarily complicated conversation. I appreciate the contribution from both of you.

I take your point, though, Professor Lagassé, about the level and the culture of secrecy around here. It does make it extraordinarily difficult. The consequence of excessive secrecy is that politicians react the wrong way to misinformation. That's something we could deal with. We could have a conversation among ourselves about that very point. We are running to the point where we can't continue to do what we're currently doing. Something needs to change.

Colleagues, we are set up for Friday.

For next week, we're taking bets as to exactly how long. The clerk will receive your bet as you walk out the door.

With that, I'm going to adjourn. Thank you again to both of you.

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