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## **Standing Committee on National Defence**

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**EVIDENCE**

**Thursday, March 22, 2018**

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**Chair**

**Mr. Stephen Fuhr**



## Standing Committee on National Defence

Thursday, March 22, 2018

• (0845)

[English]

**The Chair (Mr. Stephen Fuhr (Kelowna—Lake Country, Lib.)):** Good morning. Welcome to our continuing study on Canada's involvement in NATO.

From Brussels, Belgium, we have Martin Hill, Honorary Chairman of the NATO industrial advisory group. We don't have a video feed from him right now. We have audio, but maybe I'll put him at the end so that we can get both audio and video. The worst-case scenario is that we'll just have audio.

We also have Janet Thorsteinson, Head of the Canadian Delegation to the NATO Industrial Advisory Group, and Daniel Verreault, Director for Canada, Military Systems Operation, GE Aviation.

I'll think I'll start with you, Ms. Thorsteinson. You have up to 10 minutes for your opening remarks.

Ma'am, you have the floor.

**Ms. Janet Thorsteinson (Head of the Canadian Delegation, NATO Industrial Advisory Group, As an Individual):** Thank you very much.

First of all, let me say that it will be much easier if you just call me Janet. The meeting will go much more smoothly.

**The Chair:** Thank you. I will do that.

**Ms. Janet Thorsteinson:** Thank you for the opportunity to appear here today on an important subject that is very dear to my heart. I will make most of my remarks in English, but I'm more than willing to entertain questions in either official language. I believe you have the translation of my document.

Although I am a special adviser to the president of the Canadian Association of Defence and Security Industries, I appear before you today not in that role but rather in the role of the head of the Canadian delegation to the NATO industry advisory group, which, to save us all a lot of effort—just as with my last name—we'll now call NIAG for the rest of the meeting.

I have with me the deputy head of delegation, Daniel Verreault, who would also like to make some remarks this morning.

I would like to address very briefly four areas: the NATO environment, the role of NIAG, where Canadian industry stands with

regard to NATO, and the support we receive from our federal government.

With regard to the NATO environment, this has been a period, over the last 10 years, of great change, great turbulence, and an expanded role for NATO. This has been exacerbated by such things as cybersecurity, international governments joining NATO, and certainly the reinforcement of conventional forces on the eastern flank. There are also political changes, not the least of which is Brexit, which we anticipate will have some significant impact that is as yet unknown.

Let's turn to the NIAG itself. I know that Martin Hill will address this in some detail in a few moments, so I will not dwell on that particularly—except to say that it's 50 years old, which makes me feel aged too. Recently, because of that 50 years, there has been a review conducted of its mandate. It has been reinforced and approved by the Conference of National Armaments Directors, the CNAD. In Canada's case, the national armaments director is Pat Finn. I believe you heard from him already.

Essentially, what came out of that review was a confirmation of the existing role of the NIAG but also an encouragement for NIAG to provide advice to other agencies within NATO, beyond the CNAD itself. That includes the science and technology organization; the NATO parliamentary assembly, where I believe one of your colleagues is at the moment; and an encouragement for the NIAG to reach out to non-traditional industries and to SMEs. So there is an expanded role there.

Where does Canadian industry stand with regard to NATO? First, I would be remiss if I did not acknowledge, right off, that Canadian industry does not find it easy to participate in NATO activities. It's a long way away. Proximity matters in this world, so we face a greater challenge than perhaps some of our European counterparts. But knowledge is growing within Canada that we are a member of that industrial club too, and that we have a right to participate. We don't necessarily have a right to win—there's no *juste retour* within the NATO environment—but we have a right to participate in their procurement activities. One of the things we're trying to do is spread the information to Canadian industry about that.

Speaking of *juste retour*, I would emphasize also that the NIAG operates in the pre-competitive environment, which I'm sure Martin Hill will expand on. We are not at the point where the NATO supply and procurement agency is buying material; we're at the providing of advice before competition. This is something we encourage not only NATO to do, to seek this advice, but within our own Canadian environment it's something we've asked our Department of National Defence to do. Recent changes in their processes reflect that, too.

• (0850)

Finally, I'd like to address the support that industry gets from government. It's 10 years. A long time ago, one of the previous secretary-generals of NATO said that one year was not a long time in NATO. I suggest that 10 years is not a long time in NATO. It moves with a certain lack of speed. But things have changed in the last 10 years. If I go back and compare that far, we now have a very active national armaments director participating in the meetings in Brussels on a regular basis. We have a Canadian chairperson of the agency board at the NATO procurement and supply agency, and this agency, by the way, is the environment in which Canadian industry does the most business.

There are essentially two agencies that carry out significant procurement within NATO. NSPA is the one where Canadians have had more success, so I understand the importance of having support in that environment. There are NATO technical advisers, and Canada has one and a half. We have one at NSPA, which, given the focus of Canadian industry, is a good place to have it. We also have the half affiliated with NCIA, which carries out the communications-type procurement activities. Those procurements tend to be very large, so Canadian industry—that's a whole different subject—is sometimes overwhelmed by the size of those procurements, but we have had recent successes through MDA, for instance.

Last year we had the NITEC, the NCIA conference, here in Ottawa, the first time that they have ever met in North America. We were very pleased that the Department of National Defence hosted them here. There have been three industry missions supported by National Defence and encouraged by the Canadian Association of Defence and Security Industries to NATO. There will be another one in June of this year.

Most recently, as you know from Minister Sajjan's remarks here on March 20, there has been increased engagement or commitment by the Canadian government to NATO, things like the AWACS, and sometime in the corridor we could talk about the impact of the pullout of the AWACS project. I'm hoping that the effect of rejoining the new AWACS will be as dramatic as our departure was.

I'm grateful for the increased support from National Defence and what we are receiving from the Department of Defence. It is better than it was 10 years ago.

[Translation]

That is much better.

• (0855)

[English]

Having said that, I would like to see Canadian industry and the Canadian government more aligned, more affiliated, along the lines that we see between, say, our European counterparts and their countries. They have an open dialogue, a more integrated relationship, and the fact that we do not have as integrated a relationship does put us at a disadvantage within the NATO environment.

To give an example of that, when you belong to a club, when you feel like you belong to a club, you participate more. If you don't participate, you don't feel like you belong to the club. The fact that we are not in great proximity to NATO headquarters, for instance, puts us at that kind of a disadvantage. For at least two years, I have been prattling on within the NIAG environment about the fact that we could do more video conferencing or even phone conferencing so that Canadian companies can participate, and they are improving, but not enough. They're not improving enough because they like to schedule those calls at 8 o'clock in the morning Brussels time. I know our companies are dedicated to participating in that environment, but maybe not that much all the time. That's 2 o'clock in the morning here, or I guess 11 o'clock at night in Vancouver. Maybe companies could just stay up for those calls. I'm not best pleased about that.

We also have other innovations that I'm not going to get into, because I'm conscious that time is clicking on.

I would say that the Canadian government has ambitious goals as it relates to defence and security. It's good to see Canadian industry recognized as a key player in achieving those goals. We are encouraged by the moves to integrate those relationships. In simpler terms, in the words of a little girl I know well, "We'd like more better." They've got better, and we'd like more better.

Thank you very much.

**The Chair:** Thank you for your opening remarks.

I'll yield the floor to Mr. Verreault.

**Mr. Daniel Verreault (Director for Canada, Military Systems Operation, GE Aviation, As an Individual):** Thank you. *Merci*.

The last time I presented to SCND, I alternated between a French sentence and an English sentence and the whole room was trying to follow. This time I've decided to do it just in English, and the next time I'll do it just in French.

Good morning, and thank you for this invitation to appear before you today.

I'm Daniel Verreault. I'm the Director of Military Systems Operations at GE Canada, here in Ottawa. I've been here for 15 years.

Today in Canada, GE has a terrific portfolio with the military. We are the engine manufacturer for the Hornet and of course the Super Hornet; the Sea King and Cyclone maritime helicopters, the old and the new; the Cormorant and the Buffalo search and rescue platform; the Airbus tanker/transport; the Tutor, now flown only by the Snowbirds, but our trainer for many years; of course in the navy the Canadian patrol frigates; and we were proud to win the Arctic offshore patrol vessel propulsion that Irving is building.

Today I appear in front of you as the vice-chair of Canada's delegation to NIAG, but obviously these subjects could carry us through several meetings. I would be pleased to return at your discretion.

I have two major points from an industrialist point of view regarding NATO and NIAG. One is that it's a significant buyer of goods and services. NATO, as we heard from Janet earlier, represents huge opportunities for sales for businesses, whether from the NSPA, located in Capellen, Luxembourg, or NCIA in Brussels. Together these two organizations issue each year over \$5 billion Canadian in solicitations. In a recent report from Colonel Martin Bedard, our Canadian Forces liaison officer, who's now embedded at NSPA, in Capellen, Canadian companies have not been as successful as they should have been in winning contracts at NATO. I agree with his finding, and in my view, remedies are required to rectify the situation.

The government recognized in Canada the importance of defence procurement in creating jobs and generating wealth when it revamped the industrial and technological benefits, the ITBs, and value proposition policies administered by ISED, where for every dollar spent on defence, industry must generate a dollar of industrial activities—and not just any type of industrial activities, but good industrial activities. Although NATO does not permit member countries to demand offsets in return for their NATO contribution—which for Canada represents 6.6% of the budget—perhaps an aspirational goal could be established to begin leveraging this investment.

To arrive at a reasonable target, though, and given the complexity of reporting, a more detailed review is required to better define the value of the contracts issued to Canadian companies. Today in a reporting, a large Canadian company that has an office in Brussels, as an example, is not counted as a Canadian sale. It's easy to determine; it just needs more granularity in the reporting. To that end, we welcome the decision by Jennifer Hubbard, DGIIIP at DND, who spoke to you on February 1, to move the NATEX, that's our technical expert position occupied by a Canadian Forces colonel, from the NCIA in Brussels to the NSPA in Capellen. In his report, Colonel Bedard also shed light on the reasons for the weaker performance of Canadian companies relative to foreign ones in securing NATO contracts, and Janet has mentioned a few. The Atlantic is important. Time zone is important, but there is more to it, in my opinion.

• (0900)

My second point is that an action plan to increase Canadian companies' business performance at NATO is thus required, in my opinion. With Colonel Bedard in Luxembourg, and a recent addition of a half-time NATEX position in Brussels, Canada's share of the

wallet should increase. Results in one year would demonstrate progress, and consideration should then be given to increase the number of NATEX positions based on a cost-benefit analysis. Just as a data point, I should note that France, with five NATEX positions embedded at NATO, is doing very well indeed.

A communication plan should be developed and implemented to increase industry's awareness of NATO procurement processes and opportunities. The webinars and NATO visits being organized by Colonel Bedard are an effective way of marketing NATO to Canadian companies. These, in my opinion, should be more frequent and definitely advertised more broadly.

Trade associations such as CADSI and AIAC are currently being used to reach their membership. One suggestion, perhaps, is to offer to all companies listed in the ISED Canadian company capabilities guide the opportunity to receive NATO solicitations and emails generated by our Canadian delegation in Brussels and Capellen. In short, push information to as many Canadian companies instead of waiting for companies to ask.

Finally, as a member of NIAG, we are encouraging Canadian industrial experts to participate in our studies that are used to develop or update STANAGs, the NATO standards. These standards often form part of the statement of operating requirements included in solicitations. In addition, participating in standards setting with the NATO sponsors could lead to better success in the future, because overall a lot of this depends on the relationship with she or he who is responsible for a certain piece of the business. This would then lead to better success in future procurements.

I'll stop here. I'd be pleased to answer any questions you may have.

Thank you.

• (0905)

**The Chair:** Thank you very much for your opening remarks.

Mr. Hill, can you hear us?

**Mr. Martin Hill (Honorary Chairman, NATO Industrial Advisory Group, As an Individual):** Yes, I can hear.

Can you hear me?

**The Chair:** Barely.

**Mr. Martin Hill:** [*Inaudible—Editor*]

**The Chair:** The good news is that we can hear you and your name is easy to pronounce. The bad news is that we can't see you.

I'd like to give you up to 10 minutes for your opening remarks. Sir, you have the floor.

**Mr. Martin Hill:** Thank you very much indeed.

Look, I've been a bit thrown, in a way, by what I've just heard. I prepared some remarks that I thought were addressed to parliamentarians. Janet asked me to speak about NIAG, and I think we're confusing NIAG and NATO business slightly for the parliamentarians. What I'd like to do is touch very briefly on NIAG. I sent a presentation a couple of days ago, and I think if you read it, you'll understand NIAG better. Janet and Daniel can amplify that.

My key remarks about NIAG are these. NIAG is an advisory body that gives advice to NATO and to the nations. The nations can ask NIAG for advice if they wish, though advice is pre-competitive. The minute you say there is a contract or a competition, then forget NIAG. It's gone. We advise on potential requirements, potential standards, and it is an interesting body for all of industry. We have about 5,000 members, through the national trade associations, who can participate in NIAG activities. The initial entry cost is low. You have your head of delegation. That person will give you all of the advice that comes through the NIAG meetings. If you decide there is a topic you want to follow in more detail, then, of course, the costs will start mounting, because you actually have to think about travel, how you participate, and all the rest of it. Even then, in NIAG, it will only be a study that lasts somewhere between six months and a year, so that NIAG gives an answer to whoever's asked the question.

What I want the parliamentarians to be clear about is that there are no contractual implications in this work. It is inclusive, it is non-competitive, and it is open to everybody, even those who didn't participate in the work itself. If a Canadian company wishes to know what happened in a NIAG study, but it didn't participate, it asks Janet. Janet gives the company the report. There is one box, which is NIAG.

I wasn't going to touch on the next topic at all, but I think I will. I'm going to put on a different hat than that of the NIAG chairman. I'm going to say that I work for Thales. It does an enormous amount of business with NATO, one way or another.

I want parliamentarians to understand the NATO budget. NATO's budget, in total, is about two billion euros per year. The vast majority is spent on salaries and paying for the headquarters, and some on operations. It isn't available for procurement.

Every year, NATO actually spends, as common funding, about five or six hundred million euros on actual procurement. You have to be clear about that. NATO's is not a big budget. The reason we get to the five billion number is that, under the NATO umbrella, there are a number of coalition co-operative programs. For instance, the NH90 helicopter comes into that five billion. The Eurofighter is a NATO aircraft. So in the five billion are the co-operation programs. They're not specifically NATO funded. They're funded typically under program rules, each program having its own rules agreed to by the participating nations.

It's important to understand the difference between what I'm going to call a NATO common-funded project and a NATO program that is a coalition of the willing. The one, common-funded, Canada can participate in. Consensus is required, and it's a NATO program. With regard to the coalition of the willing, Canada participates where Canada participates. If Canada decides not to participate, of course Canada's not in the program.

Parliamentarians need to understand the difference between those two. Of course, the biggest of the coalitions of the willing coming up at the moment is the allied future surveillance capability, which is going to be the replacement of the AWACS program. I think Canada is probably in that at the moment, because it's still at its very early stages.

● (0910)

I'm going leave that for the business, and I'm going to turn to some remarks, if I may, that I thought I would address to parliamentarians and the role of parliamentarians. My feeling is that they should be involved.

The first thing I'd like to address is that over the last 20-odd years, government has, in its defence procurement, done more and more outsourcing. This means that more and more of the procurement process is actually being run by industry, because once you outsource supports, once you outsource the running of your base, it's industry that will start taking on that role. It means that what has changed over the last 20 years is the division between the parliamentarians, who basically have the overall say, yes or no, as to whether we will do this; the civil service, which does the administration and runs the actual contracts and actually writes the cheques; the military, who set the requirements and actually have to do the operations; and industry, which actually has to deliver something. The relationship has changed over the last 20 years. I think Parliament is probably not as aware as it should be of how big a change has occurred there. I think it's not just a NATO issue but also a national issue. I think something parliamentarians need to do is to put themselves more in the loop in that defence procurement process.

I think this leads on to a thought on acquisition reform. When I spoke to the CNAD in October last year, I put this to the national armament directors. The speed of technology change has increased in some areas. In electronics, of course, we're now talking about every six months, but when we're cutting steel, we cut a ship steel or a tank steel only once every 40 to 50 years. So for procurement of a system—a tank, for instance—whereas you used to buy a tank and that was it, today that isn't it. You have to upgrade that tank. You have to change the engines every 15 years. You have to change the electronics every two or three years.

The procurement process for buying these defence systems needs to be rethought. I don't have an answer, but I do think that Parliament should be pushing for how we redo the procurement process for big military systems, and I think industry is absolutely fundamental in helping to provide the answer. It's not just a NATO issue; it's a national issue as well, and I think if NATO and nations get their act together, a look at acquisition reform would be a useful way to go to try to make sure that we procure the systems we need and that we can make sure that they can be upgraded as and when needed.

That leads on to the issue of co-operative projects. I said Parliament needs to be involved more in big defence programs. Janet referred to a work share, and *juste retour*, or whatever you want to call it. I think when we're looking at these big programs—the big one going through NATO at the moment is the allied future surveillance—Parliament must follow them closely. Otherwise, we're going to get 10 years downstream in a very big procurement, tens of billions, and suddenly we're going to come up to a holdup because Parliament will go, “Oh, I didn't really like that.” I think we're missing the link, the input, of parliamentarians early enough into these big defence programs, which typically are bought as NATO programs even if they're not common-funded.

• (0915)

The last point I want to make touches on the same area. All these programs are bought with significant industrial partnerships. When you do an industrial partnership, give industry guidelines—as parliamentarians you can do that—but let industry decide on the actual partnerships and who will do what. If you don't do that, the first thing is that you're going to cause delay while industry reconsiders: “Oh, I didn't take that into account. I'm going to have to rethink.” The minute there's delay, there is of course extra cost.

I think those areas of thought are interesting for Parliament. I thought I'd put them on the table and allow you to ask questions. I have three topics. They are NIAG itself; what I'm going to call a procurement activity in NATO and under a NATO generic coalition and co-operation hat; and where I think parliamentarians can be more active, and even should be more active, in the procurement of NATO and of course national programs.

I'd like to stop there. Thank you very much indeed for your time.

**The Chair:** Thank you very much, Mr. Hill.

I'll give the first seven-minute question to Mr. Robillard.

You have the floor.

[*Translation*]

**Mr. Yves Robillard (Marc-Aurèle-Fortin, Lib.):** Thank you, Mr. Chair.

Welcome to the witnesses.

Please describe how Canada participates in the NATO Industrial Advisory Group, NIAG, and provide examples of that participation.

**Ms. Janet Thorsteinson:** Thank you, Mr. Robillard.

We have a very small team of four people who attend three or four meetings per year, sometimes in Brussels, sometimes elsewhere, to oversee the progress of the studies commissioned by NIAG.

• (0920)

[*English*]

The NIAG studies are established by expert organizations within NATO who feel they can benefit from those studies. Once the studies have been approved by NIAG itself, there is an made effort by Canada

[*Translation*]

... and by other nations to find appropriate experts in order to assist NIAG in those studies.

As I mentioned previously, it is a little difficult for Canadian companies to collaborate in those studies because usually they are almost all done in Europe. The Americans take part at times, but we have not found experts from Canadian companies whose collaboration we want to obtain. I am responsible for finding them.

**Mr. Yves Robillard:** How is NIAG improving awareness in Canada's defence sector of NATO's procurement opportunities?

**Ms. Janet Thorsteinson:** As I said previously, we make efforts to have Canadian companies come to Europe. In June of this year, a group of Canadian companies will go to Luxembourg to meet the appropriate managers, so that they can familiarize themselves with NATO's procurement processes.

**Mr. Yves Robillard:** Along the same lines, what can the Government of Canada do, and what should they be doing, to better support and assist Canadian companies to win NATO contracts?

**Ms. Janet Thorsteinson:** That is quite some question Mr. Robillard!

[*English*]

I'm sorry, I will revert to English in order to be precise in this area.

One of the issues that Canadian companies face, not just at NATO but in any foreign sale, is the question that will come up: “Have you sold this equipment or service to your own government?” This is because the practice in other countries is very much that if you have a good service, a good product, your government will buy it. There is a feeling in other nations that if your government has not bought it, there maybe something wrong with what you're trying to sell.

So one of the best ways the Canadian government can support industry in this environment is to be what we call the “first buyer”.

[*Translation*]

If our government needs a product from a Canadian company, I encourage them to buy it.

[*English*]

The PSPC first buyer program is being expanded, which is indeed a very good step, and we like to see it being expanded into the Canada innovation program. This is very good.

Second,

[*Translation*]

... as my colleague Mr. Verreault said, NATEX positions in NATO are extraordinary resources for Canadian companies. I am very encouraged that we now have one and a half NATEX positions. Given the distance, I wonder if it would not be better to have more positions.

**Mr. Yves Robillard:** At the NATO summits in Chicago in 2012 and in Wales in 2014, NATO stressed the importance of maintaining strong defence industry ties across the NATO military alliance, emphasizing the need to strengthen the defence industry in Europe and to establish defence industry cooperation between Europe and North America.

In your opinion, what progress has since been made to enhance defence industrial cooperation between Europe and North America, and how has Canada contributed to that?

• (0925)

**Ms. Janet Thorsteinson:** NIAG is currently reviewing a report entitled *Transatlantic defence technological and industrial cooperation*. Four countries are part of that study, including Canada.

**Mr. Yves Robillard:** Thank you.

[English]

**The Chair:** Thank you very much.

MP Yurdiga, the floor is yours.

**Mr. David Yurdiga (Fort McMurray—Cold Lake, CPC):** Thank you, Mr. Chair.

I thank our witnesses for joining us early this morning.

Can I call you Janet?

**Ms. Janet Thorsteinson:** Please.

**Mr. David Yurdiga:** Okay. I'm really having trouble with your last name.

In your remarks, you mentioned “increased NATO credibility with funding and support for multi-national projects”. Can you expand on adequate funding and what multinational projects you are referring to?

**Ms. Janet Thorsteinson:** The project I was referring to, as reinforced by Minister Sajjan earlier, was the AWACS replacement project. This is an absolutely critical project. At one of the first meetings of the NIAG I attended, a little over three years ago, I would say that at least three other countries figuratively yelled at me—they didn't really yell at me—about Canada's withdrawal from the AWACS program.

I am hopeful that the statement by the minister that Canada is in on that replacement project will lend support and credibility. Also, you will have heard and read many times that there has been a plea in all of the summits of NATO for countries to increase their percentage contribution to NATO, their percentage defence budget, and so forth. Recent changes in the Canadian National Defence budget I believe will do much to assuage that concern within NATO.

**Mr. David Yurdiga:** Thank you for that. It's a big concern for all members that we adequately fund NATO.

My next question is also for you. What is the relationship between NATO and NORAD? Is there any way to strengthen the relationship between NATO and NORAD? Also, how does the newly created PESCO in the U.K. fit into this whole organization? Can we tie that in somehow? Is there co-operation among all three groups?

**Ms. Janet Thorsteinson:** To my knowledge, there is no specific co-operation between the three groups. That does not mean that there

isn't; it just means that I have no knowledge of there being co-operation between them.

**Mr. David Yurdiga:** Thank you.

My next question is for you, Mr. Verreault. Did I say that correctly?

**Mr. Daniel Verreault:** Daniel is fine.

**Mr. David Yurdiga:** Okay.

What is GE's relationship with NATO, and how does the co-operation between the two entities serve the interests of both parties?

**Mr. Daniel Verreault:** Pardon me; I missed the beginning of your question.

**Mr. David Yurdiga:** What's the relationship between GE and NATO? How does that work?

**Mr. Daniel Verreault:** We obviously are a supplier to many “weapons systems”, I'll call it, to be general, in terms of air force and navy. We have a few direct NATO contracts, but our business is primarily through shipyards, ship designers, and aircraft manufacturers. From a NATO point of view, my participation was agreed to by GE in order to help Canada, in order to be an active participant in what Canada does at NATO, due to my several years here in Ottawa previous to GE and today. We are pleased to continue to provide my expertise as required.

**Mr. David Yurdiga:** Following the official opening of the newly upgraded Winnipeg testing, research, and development centre, what other major projects are being developed in Canada to enhance research and development of the aerospace technology?

• (0930)

**Mr. Daniel Verreault:** Indeed, we've invested a significant amount of money to establish a large test centre in Winnipeg. We'd like to invite you to visit. It is a one-of-a-kind, world-class engine testing centre. The facility can do both commercial and military engines. We're just finishing the test for the GE9X engine that will power Boeing's triple 7X, the largest turbo engine in the world in the market, and most likely the largest in our lifetimes due to the market.

We have a large facility in Bromont, Quebec, where we make blades and vanes, and now we've established a centre of excellence for instrumentation and robotics. Again, it's manufacturing solutions for robotics. We carry within the GE family the lead for these advanced manufacturing processes. In these very advanced technologies, one must have deep pockets in order to advance the science and the know-how.

We are pleased that we have received a Government of Quebec financial contribution, and also a federal government financial contribution, primarily in Winnipeg, where WD has been very active in helping us grow the talent pool.

Finally, we just acquired a Canadian company that specializes in powder for additive manufacturing. The 3-D manufacturing additives manufacturing will change industry, how industry makes things globally across all industries. Being on the ground floor regarding advanced manufacturing will give us a significant advantage, from the Canadian point of view and from a university research point of view also.



**Mr. David Yurdiga:** I am curious; there are challenges throughout Canada in regard to getting qualified people to fill these positions in the high-tech field. Are you finding any challenges to getting the people you need to do the jobs you have?

**The Chair:** We'll have to hold it there and yield the floor to MP Blaney.

As a reminder to members, we still have Mr. Hill on the phone. He is probably more than willing to participate.

MP Blaney.

**Ms. Rachel Blaney (North Island—Powell River, NDP):** Hello, everybody, and thank you so much for being here. I enjoyed your presentations.

I have a couple of questions. I'm going to leave it open to all three of you to respond about what we heard a couple of times, especially in Janet's and Daniel's presentation, on some of the challenges we have to opening up industry. I appreciated what you said about taking a rather active approach rather being inactive or passive. Instead of waiting for companies to ask, it's getting the information out to Canadian companies. You talked about the challenges we have, because we are so far away, and the time zone issue.

Both of you said a little bit about solutions. Can you tell us what some of those solutions are? How can we engage with industry to build up those relationships?

**Ms. Janet Thorsteinson:** The first thing that I would say with regard to this is that I'm a very old engineer, but I am very hopeful of the benefits of technology. The NATO personnel are moving into their new headquarters across the street, hopefully as we speak. I am advised that the technology is built into that new headquarters, which will help with this. Even this morning, I received an email as I was coming here from one of the companies that is participating in one of the studies. Their advice to me was that they will have to be just essentially an observer in that study, because they cannot make that physical outreach all the time. That's a factor.

I think the decision to have another trade mission, essentially, to Capellen this year is something... I do feel that companies need to go several times, just as they need to deal several times with anyone else with whom they want to do business, whether it's in Canada or abroad. That ongoing support is important.

● (0935)

**Mr. Daniel Verreault:** It also requires knowledge of the events that are taking place, and this knowledge must be shared with technical experts. It's not a given when a sales or marketing person receives an email about the widget being redesigned to make this available to the technical expert who works on the second floor.

There's a lot of awareness needed to make sure that the right people are in the room at the right time.

One of my proposals, in fact, is to have the various agencies and departments involved push the information using different tools, like the ISED tools as an example. It's broad and it reaches the IBMs all the way down to the small IT companies. We know how small Canadian IT companies can have a significant influence in the world, especially the last couple of days.

It's pushing the information. It's not an expensive investment. It's having access to the data, which we have, and pushing the information on a regular basis. Then if there are questions, call Janet and I for these answers. We'll be pleased to assist.

Again, very micro studies are being done, resulting in big decisions.

**Ms. Janet Thorsteinson:** In support of what Daniel was saying, I would also add that Lieutenant-Colonel Martin Bedard in Capellen is making efforts to get NATO requirements and NIAG study information put on to "Buyandsell" Canada.

I'm sorry, Martin, I interrupted you.

**Mr. Martin Hill:** I'd like to answer this question, and I hope my answer will address something that was said earlier about how NIAG can improve awareness of procurement possibilities, which was a question asked in French.

Actually, it's not a NIAG function to warn you of procurement possibilities. That is the function of the national delegation. I'm going to come back to this question: how do we get industry more involved? I believe industry will be involved if their number one customer is interested. Of course, their number one customer is their national ministry of defence. If I look at the more successful nations in the NATO environment, there is an extremely close relationship between national industry, the national delegation, and the MOD in the capital. Indeed, those three meet constantly.

The role of the NATEX is to provide what's actually going on in the agency doing the procurement, or the state of the procurement. None of the really important decisions are made in the agency. They're made in NATO headquarters by the various committees where the national delegation sends representatives. All the funding decisions are done by the investment committee representative. If Canadian industry doesn't know their investment committee representative and they're not in a dialogue, they will be in no position to influence the financial decisions on any project.

So I would say to you that if you want to help Canadian industry, you must make sure that the industry, national delegation, and MOD—three points—are very closely coordinated. This brings me back to the point that your NAD must push for this to happen. If your head of procurement isn't pushing that NATO is important, then national industry won't think that NATO is important.

That's something that I think goes beyond NATO, if you like. It's very much in the capitals, and Parliament should be pushing for the national MOD to push for it as well.

I'm going to go to the nitty-gritty of time zone distance. We are all aware—

● (0940)

**The Chair:** Mr. Hill, unfortunately I'll have to leave it there. We might be able to circle back on that issue.

I'll yield the floor to MP Fisher with a last seven-minute question.

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

Thank you, folks, for being here.

Mr. Hill, thank you as well for being here on the phone.

It's clear that a lot of us are interested in the Canadian companies and the way they bid, and their success in bidding on NATO contracts. I represent Dartmouth—Cole Harbour in Nova Scotia, which is of course home to Ultra Electronics, General Dynamics, Lockheed Martin, and IMP. Of course, we have Halifax shipbuilding across the harbour, and we cut the steel in Dartmouth.

Janet, you touched on the barriers—proximity, the 8 a.m. phone calls, and so on—in your opening comments, and then you expanded a little bit with Mr. Robillard on some of those barriers for Canadian industry. With regard to bidding and winning, I won't necessarily get you to repeat all the barriers you spoke about, but in comparison with other NATO countries that are applying for these contracts, with regard to fairness and level of input within NATO, we rank pretty high; we punch above our weight class, and we know that. How are we in comparison with the other countries? Taking into context the barriers that you spoke about, how do we rate with regard to our success? I'll ask Daniel after that for a GE perspective.

**Ms. Janet Thorsteinson:** There is an old quote that says there are lies, damned lies, and statistics. We have a report from the Department of National Defence that shows some statistics about how much business Canadian companies are doing at different agencies. It's a well-compiled report; it's based on solid data. What it doesn't do—because nobody has quite figured out how to do it that I know of—is address when a Canadian company has a subsidiary or an office in Stuttgart and they win a contract through that office in Stuttgart. We have examples of exactly that.

When we look at the report, as my granddaughter would say, “we want more better”, but we don't actually know what we're asking for, because we don't know the quality of the data that's there. We can only say that we want to do more, because we think that we have good products, good services, a good reputation, and that we should be involved in that.

**Mr. Darren Fisher:** Daniel, do you want to make a quick comment from a GE perspective? I have a couple more questions that I want to squeeze in before the end of my seven minutes.

**Mr. Daniel Verreault:** Janet is absolutely correct, but from a macro point of view I'll give you some examples. There are 65,000 companies registered at the NSPA, and only 700 are Canadian. Of the share of contracts in 2016, Canada received 1%. If you add a few contracts for errors in accounting or that were missed, maybe we're at 4% or 5%. At the NCIA in Brussels, 850 companies are registered to do basic order agreements, which is daily business with the NCIA. Of these 850 companies, only 26 are Canadian. From the get-go, we are significantly missing opportunities.

**Mr. Darren Fisher:** Are we partnering up as subsidiaries to some of those European companies that might be getting those contracts, as Janet suggested? Are we in the subsidiary business?

**Mr. Daniel Verreault:** Yes. These bids often involve a multitude of companies. Just think of the future of surveillance, as an example,

where we are very good globally. We have terrific technology. One is at IMP, as an example, with the Aurora. Definitely we should be playing a significant role in these procurements, perhaps not as the prime contractor, but as first-tier suppliers.

• (0945)

**Mr. Darren Fisher:** Yes, I get you.

I know I'm asking a question that might be beyond the realm of your expertise, but how might PESCO impact positively or negatively in terms of our success and/or our lack of success in what we just talked about?

**Mr. Daniel Verreault:** I cannot answer that in terms of black and white.

**Mr. Martin Hill:** Can I make a comment on this issue of prime and sub?

**Mr. Darren Fisher:** Yes, by all means, Mr. Hill.

**Mr. Martin Hill:** Everything in NATO is awarded to the prime. There is nothing given to the subcontractor. The records that NCIA and NSPA hold actually need to be dug into much more deeply. I have asked for years that the major subcontractors also get listed along with the primes, because the statistics are grossly distorted by that fact.

**Mr. Darren Fisher:** Okay.

Mr. Chair, how much time do I have left?

**The Chair:** You have a minute and 20 seconds.

**Mr. Darren Fisher:** I was going to save this question for another round, but with respect to the NATO national technical experts, the NATEX, I'll ask a couple of quick ones, and maybe we can see if we can get answers. What is the role of a NATEX? What is the advantage of a NATEX? Do we have one? If we don't, did we? Do you think we should?

I'll go to Janet first and then see if there's any time for anybody else to comment.

**Ms. Janet Thorsteinson:** The NATEX provides information on what's being done within a specific agency. Canada has one and a half NATEX—one in Capellen at the NATO supply and procurement agency, and the half in Brussels headquarters supporting the NCIA.

Tell me again the rest of the pop quiz.

**Voices:** Oh, oh!

**Mr. Martin Hill:** Can I answer some of that?

**Mr. Darren Fisher:** Yes, by all means. You can take the last 30 seconds, Mr. Hill.

**Mr. Martin Hill:** The NATEX is fifty-fifty funded by NCIA, or the agency, and by the nation. His role is fifty per cent to support the national industry in finding out what the agency is doing, and fifty per cent to support the agency itself. His really important role for the nation is that he sits on the national technical experts group and validates the agency's technical proposal. If that technical proposal by the agency excludes a solution provided by a Canadian company, that is bad for Canada, it's the NATEX who sits there and says, "I don't like that solution. Change it." He's a really, really important person at that level.

**The Chair:** Thank you very much.

We'll go to five-minute questions with MP Gerretsen.

**Mr. Mark Gerretsen (Kingston and the Islands, Lib.):** Thank you, Mr. Chair.

Janet, in your opening comments you talked about how NATO used to move with a lack of speed but it's better now as it relates to its procurement. Can you explain why it's better now?

**Ms. Janet Thorsteinson:** If we go back 10 years, the systems were not so automated and were not so open. Both NCIA and NSPA publish their requirements. Both use automated systems. If you're a registered supplier, you have the opportunity to bid on requirements in a much more timely manner.

But please do not interpret my remarks as implying that NATO moves with rapidity now. They are just less slow than they used to be.

**Mr. Mark Gerretsen:** This is what I was getting at. We have this world that revolves around procurement, and quite often technology moves so quickly that we seem to run into the problem where, by the time we've gotten the product we've sought to get, it's out of date in terms of its technological lifespan.

**Ms. Janet Thorsteinson:** Absolutely. Martin Hill just a few moments ago made reference to the issue of how to keep it up to date. Even if what you got was what you wanted at that time, how do you deal with the issue of technical insertion?

**Mr. Mark Gerretsen:** I guess my bigger question as it relates to NATO is how does a NATO structure, which involves so many different parts that feed into it, stay at a pace that stays in line with how things in the world are changing so rapidly with regard to procurement? How do you do that when you have so many different parts?

What we're really trying to do here is come up with advice to the government on what Canada should be doing differently, or on how it should be participating in NATO. That's the exercise we're undertaking on NATO. Stemming from that question, do you have any recommendations on what the government can specifically look at doing that would help in this area?

• (0950)

**Ms. Janet Thorsteinson:** I think the issue is exactly the same within the Canadian environment itself, and I don't think the Canadian environment has identified a real solution to this problem either. If we manage to find a solution within the Canadian environment, my best advice would be to share that with NATO—or, if they find it, let's take theirs. At the moment, I have no specific recommendations.

**Mr. Mark Gerretsen:** In 2014 you wrote an article in which you said that Canada has needed a defence industrial and exports strategy for years in order to

bolster Canada's sovereignty and national security interests, and to maximize high value economic activity in Canada from defence spending at home and abroad. Doing so would bring Canada in line with the practices of its NATO allies and most other...industrial countries.

I'm curious to know what your position is on that today, whether you think there is still a need for that strategy, and how this might bring us in line with the practices of NATO.

**Ms. Janet Thorsteinson:** I think the recent changes in policy with regard to defence procurement and the procurement strategies have moved us closer to what I was seeking in that article. Could we get closer to it? Absolutely we could. But just like everything else I've talked about, it is getting better. I think if you look at some of the European allies, they have a much more integrated industry-government relationship. I don't think we will get there, in my lifetime, in Canada.

**Mr. Mark Gerretsen:** You're segueing perfectly between my questions, because my next question was going to be about the comment in your opening remarks that we don't have as integrated a relationship as other NATO countries do with NATO. Why is that? Is that because of the geography?

**Ms. Janet Thorsteinson:** No, I think it's a cultural issue. I think the Canadian procurement system—I'm digressing for a moment, I'm sorry—with things like the agreement on internal trade, which highly regulates what we can do within Canada, presents a certain challenge in this regard. There is no doubt that—

**Mr. Mark Gerretsen:** The chair is going to cut me off—I'm out of time—but I think I'll have more time later, so perhaps you could hold that thought. I'd like to pick up on that cultural element when I have more time.

**The Chair:** Thank you for monitoring your own time. I really appreciate that, actually.

MP Gallant, the floor is yours.

**Mrs. Cheryl Gallant (Renfrew—Nipissing—Pembroke, CPC):** Thank you, Mr. Chairman.

I particularly want to home in on our guest across the way and Mr. Hill's comments that parliamentarians should become more involved in the procurement process. That could be problematic if you're in cabinet and you have access to the chequebook and friends who might want some of those procurements.

We have been educating ourselves as parliamentarians, particularly through the NATO Parliamentary Association. For example, on shipbuilding, a number of us have gone to different countries to see how they have come upon the design and to see how they have their ships built on time and on budget. Take the Danish model; their patrol ship, I believe it was. They use a modular system. They have one project manager, and his job is to make sure that the entire project happens on time and on budget. They've been quite successful.

When we went to the national shipbuilding strategy here in Canada, we allocated part of the work on the east coast and part on the west. Another opportunity came up in central Canada. That one has been built on time and on budget, one of our supply ships—at least to be leasing for the next five years. When we asked in this committee whether or not the Canadian surface combatant would be using this modular system, which we've seen be successful in the Danish example, we were told, no, they were just going to leave the design up to the contractor. Subsequently, we're seeing that the responsible budget, which started at the order of \$26 billion, has increased to the order of \$100 billion.

So we tried to give our input to keep costs and timelines...since we don't even have a destroyer in our entire navy right now. We tried to make them timely. One of the ways to do so would be by taking a look at a country that's been successful, and they would have none of it. In fact, the strategy seems to be to engage many subcontractors or co-contractors, in some cases, that have a direct affiliation with the prime contractor. They're making profit over profit over profit that way, instead of looking at the Canadian taxpayer and our national security in getting the best value for our dollar in good time. So I just wanted to let you know that we have been trying to give input, but it just has not been accepted.

I have a question for you, Janet. What is the process for Canadian small businesses, with unique technology relevant to defence, to make their products available to your group? I know that being a member of CADSI is one of the ways, but that's very expensive for a small group. They do have the capacity to provide their products and services across NATO; it's just that they can't seem to make that contact. What would you suggest to industries in Canada who are small and the backbone of our nation? They can't all be GEs at the same time, but nevertheless, they have this unique and very important technology to use, and that is being implemented by different countries, just not through the NATO group. How can we help them along?

• (0955)

**Ms. Janet Thorsteinson:** Well, I'm not here as a representative of CADSI. I will, however, say that a membership of about \$400 per year is not exorbitant, I don't think, for even a small company, because the small companies pay only that much.

Second, I think we need to recognize that for a small company to go even on a mission to Europe is a significant investment. What we have done to some extent is that we have in the past invited the Canadian NATEX to come to Ottawa to meetings with small businesses so that they can learn more about how to do business with NATO, how perhaps to make outreach to the prime contractors who are active in NATO, and to learn the process as well. I know that both Colonel Bedard and the previous colonel, Colonel Bates, have both spoken with small businesses here in Ottawa.

**The Chair:** We'll have to leave it there. We're a bit over time.

I'll yield the floor to MP May.

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

First of all, thank you all for being here this morning. I am a guest on this committee today, so I'm a bit out of my element. I'm here representing MP Alleslev, and I wanted to mention that she was very

pleased to hear that you would be here today, and she apologizes that she's not. I'll do my best to represent her well today.

For my benefit, as somebody's who's not typically on this committee, I'm wondering if you can elaborate on the differences between the NSPA and the NCIA procurement agencies within NATO, and give some ideas as to why Canada is less successful with the NCIA.

**Ms. Janet Thorsteinson:** NCIA focuses more on communications and informatics projects. Their projects tend to be very large. Some Canadian companies are capable of doing that, and some of them have been very successful—CGI and MDA, for instance. However, Canada produces an exceptionally broad range of goods and services. That broader range of goods and services, which also tend to be, by and large, of smaller dollar value, are more suited to the Canadian environment, and that seems to be where Canadian companies have elected to participate more.

• (1000)

**Mr. Martin Hill:** Can I answer some of that?

**Mr. Bryan May:** Please, Mr. Hill.

**Mr. Martin Hill:** NCIA does the “C3” for NATO. Its budget is relatively small, about \$300 million a year. It is very difficult to get into NCIA, because it's very specialized in the C3 field. They have a lot of suppliers that have been there for years. My company, for instance, has been there for years and years. It is difficult for what I'm going to call the North Americans to get into NCIA, because it's almost all common-funded and therefore has very particular procurement rules.

NSPA is the big procurement agency that does projects that are given a title—NATO—and AFSC and AGS are both NSPA. All those really big, almost infrastructure defence projects go through NSPA, and almost all of them are also coalitions of the willing rather than NATO. If Canada is in the coalition, you will have all the access you need, and it is your national delegation who will know far more, actually, about the political and the financial end of those deals than will NATEX.

I cannot stress enough the importance of the national MOD, the national delegation, with the NATEX agency, working together. That is absolutely fundamental to success, and it would mean that your national companies would go to Ottawa to find out about these projects and the Canadian position, rather than having to travel all the way to Capellen in Luxembourg. I think that's really important for you to understand.

**Mr. Bryan May:** Thank you, Mr. Hill.

I'll go back to you for a moment, Janet, to expand on something that MP Gerretsen was speaking about. You suggested in your opening remarks if you had more time...in terms of identifying innovation that Canada should be focusing on to help in our process. I often find that technology is not the issue; it's the adoption of technology that is the barrier sometimes.

Do you have any suggestions of things that Canada could be focusing on from an innovation perspective that would help give us an advantage in NATO?

**Ms. Janet Thorsteinson:** A few years ago, the Department of National Defence issued a report by one of their science and technology committees on the issue of technical insertion and how that might be more effectively conducted within the context of long-term, high-technology contracts, and the challenges associated with that. I don't think I currently have a copy of that. I think I had it sometime in the past. It's something you might like to look at.

**Mr. Bryan May:** Does Canada have specific advantages right now that we are not taking advantage of and should be?

**Ms. Janet Thorsteinson:** I think the primary advantage I see right now is the shift in political focus for commitment to NATO and the minister's statement on the 20th that support for NATO was ironclad. I was exceptionally pleased to see that, and I look forward to exploiting that all I can. Thank you.

**Mr. Bryan May:** Thank you.

Do I have time for one more?

**The Chair:** No, you're over time—just barely.

I'll yield the floor to MP Bezan.

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

I want to thank our witnesses for being here.

Before I get into my questions, I want to say quite clearly that I'm a huge supporter of NATO and everything it does. Canadian participation in it is very important, especially to the Conservatives and I believe to all members of this committee. However, this one question has been raised to me in the past, and now we have the industrial representatives who participate at the NATO level here with us. We're always asked to keep participating in NATO. We are the fifth-largest contributor and we're leading the enhanced forward position in Latvia. We have boots on the ground, we're providing technical and financial assistance, and we're large participants at NATO headquarters and at SHAPE.

Yet, according to what Daniel just said, Canadian companies only get 1% of the contracts. I know you have lies, damned lies, and statistics, and I don't know what percentage dollar value that represents, but if Canada and Canadian companies are not benefiting from being part of NATO, and if the European nations definitely want Canada at the table and want Canada participating in NATO missions, shouldn't Canadian industry be getting something back out of that?

•(1005)

**Mr. Daniel Verreault:** There is no doubt that we should be doing far better. There is no doubt that, given where Canada is located, with our friends to the south and with what's happening in Europe, Canada is very well positioned to play a bigger role at NATO. From an industry point of view, and for the reasons quoted before, we are very challenged to make a big difference. The participation in the AWACS replacement will go a long way toward having Canadian companies more embedded in what's happening from a technical point of view and a business point of view at NATO. These common

programs bring upon us far more benefit, because when you're in the headquarters and you're walking the halls, although there are limits due to security, you are still able to meet, discuss, advocate, and lobby. It's these events that add to our value in participation.

It is clear that in many fields we have world-class products. Yes, we need to choose companies as opposed to broad participation. We need to pick and choose carefully, because this is a long-term game, at a very sophisticated level of technology.

**Mr. James Bezan:** Thank you.

Mr. Hill, you are the European in the room and have experience with both NATO and everything that's happening now with PESCO. One of the ideas behind PESCO, to my understanding, is that they wish to do more collaborative work on the procurement side, and have more interoperability. Is that something that benefits NATO, or do you see that as something that will undermine NATO?

**Mr. Martin Hill:** I'm not the expert on this, but I think it's quite clear that anything that happens under PESCO will benefit NATO. What it fundamentally will do is produce what we'll call a European “pillar” of capability that will of course be available to NATO, because the nations who own it are members of NATO, and they will allocate it to NATO as required. It's complementary, and absolutely not in competition. I think that's very important to understand.

Going back to the earlier question, there is dialogue at all levels between the EU and NATO in the defence environment. Much of it is informal. There is little formal dialogue, which makes it all a bit difficult to manage. When the EU, the EDA, or a commission does something, NATO is aware, and the two organizations do make sure that they are not spending their money twice, if you see what I mean. There's only one set of dollars to be spent on all of this. PESCO is complementary to NATO.

**The Chair:** We're going to have to leave it there. The last five-minute question will go to MP Gerretsen.

**Mr. Martin Hill:** Can I just say one other thing? I cannot express enough how important it is for the government to push. With 1% of contracts, what you can do is in the infrastructure, in the investment committee, you can start being a bit reluctant to approve things and insisting that a Canadian company get something.

Now, that's highly political, highly charged, extremely unacceptable, but other nations do it. Why shouldn't Canada?

•(1010)

**The Chair:** Thank you for that input.

I'll yield the floor to MP Gerretsen.

**Mr. Mark Gerretsen:** Janet, just to go back to our discussion about the culture of NATO, Canada's role, how Canada looks at NATO, or how Canadians look at NATO, can you expand on what we were previously discussing?

**Ms. Janet Thorsteinson:** I'll say a couple of things on that.

First of all, I think Martin just told you the answer to a lot of that. The position taken by other nations may sometimes not be in line with approved practice. As Martin said, other countries do that.

As well, I think on the cultural side there's a difference in the relationship between industry and government, because, for instance, in many, many European cases, the companies are owned by the government. Navantia has strong government part ownership. I don't think it's fully owned, but Navantia has ownership by the Spanish government, and therefore it's quite natural that there would be a degree of co-operation and communication. Canada has historically not owned defence companies. They haven't needed to. They didn't feel they needed to.

Those natural communications are what I'm referring to in terms of culture.

**Mr. Mark Gerretsen:** Do you agree with the comment that Mr. Bezan made related to Canada getting only 1% of the contracts? Does that jibe with your information?

**Ms. Janet Thorsteinson:** I think it's very hard to tell what the statistics really are in our environment. I absolutely know of contracts that were awarded to Canadian companies through a European subsidiary. Martin Hill said earlier that there is no access to subcontracting data, so I am reluctant to say that this percentage or that one is a good percentage.

**Mr. Mark Gerretsen:** Okay.

Daniel, you're with GE. Can you comment on the amount in terms of dollars or percentage of contracts that GE would get from that Canadian portion? Do you know that?

**Mr. Daniel Verreault:** The answer is zero.

**Mr. Mark Gerretsen:** How do you mean?

**Mr. Daniel Verreault:** General Electric Canada does not currently have any contracts with NATO.

**Mr. Mark Gerretsen:** Would you like to get some contracts with NATO?

**Mr. Daniel Verreault:** Of course.

**Mr. Mark Gerretsen:** I'm really trying to tease out recommendations today. What the committee needs to do at the end of the day is to provide a report with recommendations to the government. How would you suggest that Canada engage in its relationship with NATO in order to be able to provide more contracts to Canadian-owned companies? Do we take the hardline approach that Mr. Hill indicated, which other countries are doing, or is there another technique? I'm curious to get your input on this.

**Mr. Daniel Verreault:** We need to be more visible at NATO, everywhere at NATO. We need to be more active. We need to be more engaged. We need our experts engaged in standard setting. We need to be visiting them more often and investing in a smart way. It takes a couple of years for anyone to understand the vernacular at NATO, so this is a long game, but in the end, because of the challenges the world is facing, we need more friends, and we need to be more engaged with more friends.

• (1015)

**Mr. Mark Gerretsen:** Great.

I think I only have about 10 or 15 seconds left, but I guess what I would like to leave you with is this. It applies to Mr. Hill too. We've talked about what Canada needs to do, but we really need some concrete recommendations as to what the government should do, as opposed to what the objectives should be for what they should do. If you come up with anything at a later date, I'd ask you to submit that to us, because it would be extremely useful in terms of what we recommend to the government.

Thank you, Mr. Chair.

**The Chair:** MP Blaney, please, for three minutes.

**Ms. Rachel Blaney:** Thank you.

I guess my question goes to you again, Mr. Hill. You talked about how procurement over the last 20 years has fundamentally changed and how there's now this intersection between the military, parliamentarians, civil service, and industry. Do you have any examples of a better practice or suggestions about what parliamentarians on both sides of the floor can do?

**Mr. Martin Hill:** I think my remarks here are more about, as you say, these huge cost overruns and delays in these large defence programs. There's no doubt in my mind that we are not procuring them correctly. That means civil servants, military, and industry have somehow got it wrong. Having looked at it for some time, it seems to me that those three bodies are not capable of looking at themselves and saying, "What shall we change?" I think it's up to parliamentarians to say, "This is not acceptable. You three must change." I think there is my recommendation or my thought, that parliaments and parliamentarians in all of our nations—not just NATO, but it will feed down to NATO later—should be saying, "It is not acceptable to have these cost overruns and you have to relook at procurement."

You mentioned modular ship construction or procurement. I think that is the way to go.

There's another word I've heard used in terms of an "architectural" approach to procurement. When I look at what's going to happen in the future AWACS or the allied future surveillance capability, it is almost certainly going to be an architectural approach to the procurement. I think it would be worth any nation's looking very carefully at defence procurement as to how we marry the cutting steel that lasts 50 years to the PCs they're going to buy and use that only last two years. How do we match those disparate procurement cycles and technology cycles and make a smart procurement? The acquisition cycle really needs looking at again. That would be my answer there, I think.

**Ms. Rachel Blaney:** Does anybody have anything to add? No?

Okay. I only have 30 seconds, so I'll let it go.

**The Chair:** Okay.

We do have time available. I saw there was will from the committee to continue, so we'll go to a couple of five-minute questions. We'll start with the Liberals, Conservatives, and NDP.

I yield the floor to Mr. Fisher. I understand that he will share his time with Mr. May.

You have five minutes, MP Fisher.

**Mr. Darren Fisher:** Thank you, Mr. Chair. I will try to tie up only two and a half minutes so I can give some time to Mr. May.

At the risk of repetition, as this has been discussed a lot today, what can the Canadian government do better to support and facilitate Canadian companies?

Daniel, you had a great suggestion: the Canadian capabilities guide. Also, Mr. Hill gave a very good recommendation, but then he ran out of time. I agree with Mark that it's important to get these suggestions on the record.

Mr. Hill, you ran out of time when you were giving a really good recommendation, so I want to know if you want to take another minute and a half or so to make a recommendation on how we can help Canadian companies better bid and win on contracts.

**Mr. Martin Hill:** My number one point is that these are difficult. Government and defence industry must be closer. With regard to the relationship between your defence companies, civil service, military, if you want to win in NATO, that has to be really, really close, which means a change in culture as much as anything else. That's one thing to look at.

I think acquisition reform is fundamental. I think you should look at supporting your industry to participate in NIAG studies. The reason is that NIAG studies set future requirements, future standards, or they set inputs to those two things. It is extremely interesting for your industry to know what is going on in that area. It helps them to find a product policy strategy for themselves. It also helps them enormously to network with other industries in the domain, and set up the partnerships they will need if they're to be part of the bidding team in the future.

I have one last thing on that. I think government needs to think very carefully about what industries participate in trade associations. It isn't just the SMEs who government wants to participate; it's quite often big companies who don't participate in defence but you would like to see them...in particular, the big electronic cyber-type companies. They're not interested in defence, but you, the defence establishment, want them to participate. There is quite a bit of government push to industries that aren't members of defence trade associations. You need to consider what you're going to do to get them to participate.

• (1020)

**Mr. Darren Fisher:** Perfect. Thank you, Mr. Hill.

If I have any time left, Mr. Chair, I'm happy to pass it on to Mr. May.

**The Chair:** You're at about 2:20.

**Mr. Bryan May:** Thank you, Mr. Chair.

One of the disadvantages of going second is that you run the risk of having your question poached, so thank you for that, Mr. Fisher.

**Voices:** Oh, oh!

**Mr. Bryan May:** I'll perhaps stick with you for a moment, Mr. Hill. I want to talk a bit about Canada being the first buyer. You talked about this a little earlier today. I have the honour of representing Cambridge, Ontario. We've transitioned over the last 20

or 30 years from heavy manufacturing to more high-tech manufacturing. A lot of companies are trying to break into that defence contract market. Do you have any suggestions, things that I can take back to my constituents and my industry in my riding, on how I can help direct them with regard to moving toward that domain? It's something that a lot of them have never really attempted before.

**Mr. Martin Hill:** Do you mean you want them to join the supply chain of the major primes in the defence environment?

**Mr. Bryan May:** Yes. A lot of them are smaller high-tech manufacturing companies. They're trying to get a sense of what their first steps should be.

**Mr. Martin Hill:** That's a very difficult question, because it goes much wider than that. One, I think they will need a government push. You're trying to break into the supply chain of the big primes. It's not easy to become a Lockheed Martin supplier and persuade them that you have a great technology. I think you need a very strong government push to help them. I think that's the first thing.

I think participation at the bigger shows in Europe and the States is important, not because you can showcase your capability on a little stand but because you can go around the big primes and talk to them and get to know people. Networking in this sector is almost as important as anything else. You do business with your friends. I cannot stress enough how important it is to be seen two or three times in a domain, to build your personal credibility and your company's credibility. It is an expensive matter, as Janet has alluded to, but the marketing element for those small companies is very important.

**Mr. Bryan May:** Thank you, Mr. Hill.

**The Chair:** Janet, I know you wanted to wade in there, but I'll have to go to Mr. Bezan. Hopefully, there will be another opportunity for you to comment on that.

MP Bezan.

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

My question is to all three witnesses. What's the role of industry to ensure that we have NATO interoperability when it comes to our equipment and services? I'd also like to get your feedback on the Turkey decision to buy Russian S-400 air defence missile systems rather than buying something that is interoperable with NATO nations.

**Mr. Daniel Verreault:** I am....

No, go ahead, Martin.

• (1025)

**Mr. Martin Hill:** Okay.

Interoperability is not really an industry issue, in many ways. The first way we look at it is of course with regard to standards, and that is something we work on. Even then, we frequently don't actually apply NATO standards. We create our own. So standards is a good, okay word, but I'm not entirely convinced in my own mind that it's the right way to go...or not the right way to go; I don't think it's the whole answer to the question.

I think interoperability is something that the agencies try really hard to achieve in the NATO environment. I think at the national level, it's the procurement executive who does interoperability more than it is industry. Although, of course, industry will say we're fully interoperable, actually it's government demand more than it is an industry output.

I'm not really prepared to comment on the S-400, I'm afraid. That is way beyond my pay grade. It's entirely up to Turkey.

**Mr. James Bezan:** Mr. Verreault.

**Mr. Daniel Verreault:** Martin stole my point regarding interoperability. It has to be driven by the customer, and industry will respond. Obviously, we don't have broad options in many of the systems today. When you go down the path in avionics interoperability, way early on you decide what standard you will adapt to or you will follow in order to reach as many customers as possible. Since technology now is changing so quickly, you want to pick the right one. That's based on the marketing study that's done years before the product is first designed, and it's based on who the clients are and what the clients, the customers, the military customers, wish to achieve in terms of interoperability of weapon systems, not only between air and ground but also between air and naval assets.

**Mr. James Bezan:** Thank you.

Madam Thorsteinson, do you have anything to add to that? We had a brief discussion earlier about this issue of upgrading the procurement process at NATO. What would that upgrade look like if you got to rewrite it, especially with your experience from back when you were in National Defence and military procurement? If you look at what NATO is doing today, how would you upgrade the current process so it works better for member nations and for industry also?

**Ms. Janet Thorsteinson:** An issue that has long been advocated is the addressing of military specifications. This is not an industry issue. It is a government issue.

I was listening yesterday to someone talk about the 8,500 mandatory requirements in a recent procurement. I have, from my previous life, some experience of what might constitute mandatory to the extent that people can define what their real requirement is in such a way that industry is in a position to provide the kind of innovative solutions that they have at their disposal and not be ruled out from providing their very best equipment, in some cases, by what may be obsolescent requirements. I think that would be a very radical improvement in how procurement is done not just here but also within NATO.

That's my personal opinion.

**Mr. James Bezan:** Thank you. I like it. I agree with you.

**The Chair:** The next question goes to MP Blaney.

**Ms. Rachel Blaney:** My question is going to be brief; maybe we can leave a bit early. What I keep hearing again and again is that it's about the relationships that are built and that we need to sort of create that networking. We're so far away, and that's one of the fundamental big challenges, but there are innovative ways of looking at that.

I feel as though I'm not coming out with a very clear recommendation about how we can actually engage our businesses, how we can increase that networking opportunity. I'm also one of the people who participate in the NATO Parliamentary Assembly. We go out and we do what we can, but what can we do as parliamentarians to give support?

I'm going to come back to what you said, Daniel, and to what I've already said. Instead of waiting for companies to ask to participate, how are we engaging those companies to participate more actively?

• (1030)

**Ms. Janet Thorsteinson:** Recognizing the time, I would point out that Martin Hill talked extensively about the idea that there needs to be, in our capital, that kind of close relationship. I think this issue starts at home for us. I believe there is a willingness, in light of Minister Sajjan's statements, to develop that relationship, and I am encouraged by that.

**Ms. Rachel Blaney:** Thank you.

If that's all, then I'm good, Chair.

**The Chair:** You can chime in, Mr. Hill, if you can do it in 60 seconds or less, please.

**Mr. Martin Hill:** Yes.

One, you cannot push a company to do something. It's an independent entity. You can either provide it with the framework where it can act—the government can do that, as Janet's just alluded to—or you can push ideas to the company, which is all about, once again, the government, the delegation, the NATEX, CADSI, the trade association, pushing information to the company. Then the company decides what it wants to do.

**The Chair:** Thank you for that.

The last question will go to MP Robillard.

[*Translation*]

**Mr. Yves Robillard:** Since its creation in 1968, NIAG has conducted more than 225 studies on a range of topics of interest to the NATO military alliance. Recent NIAG studies and reports have focused on such issues as transatlantic defence technological and industrial cooperation, cyber defence, maritime force protection capabilities, and ground-based air defence capabilities.

What has been Canada's contribution to the studies and reports to date? How do those studies and reports help NATO to develop key capabilities and stimulate the defence industrial cooperation across its member countries? What key themes of interest is NIAG looking at for future studies and reports?



[English]

**Ms. Janet Thorsteinson:** There has not been as much participation in the studies of NIAG as I would like to have seen over those 200 studies. We've talked a little bit about why that has happened. As we move forward, I hope that we will be able to do that.

It is, I think, exceptionally challenging also to know which countries may have influenced positions or policies, in particular given that NIAG studies operate on a consensus basis. There are no secondary opinions issued in NIAG studies. All the members are equally credited and equally responsible.

**The Chair:** Thank you.

**Mr. Martin Hill:** Perhaps I can say one thing here that I think is relevant. North America has a problem, not just Canada, in much of this. There aren't enough United States companies taking part. I think it might be quite interesting for Canada to think about co-operation as North Americans, because it would give you two votes and more push than if you were to try to do it as Canada.

**The Chair:** Thank you for that.

I didn't get a question, and I don't really need one, but I wanted to make an observation. I wrote down a few words: "visible", "experts", "engaged". Obviously, our re-engagement with AWACS is important. I think it will bring some more visibility to our involvement with the organization as a whole. Certainly, leading that battle group and the enhanced forward position in Latvia is another effort that is getting a lot of attention. Regarding experts, I noticed that we had 1.5 NATEXs. France has four or five. Perhaps it's something that we want to consider investing in to help get us more engaged, and then buy Canadian where we can. We have world-class products and services, and it instills consumer confidence in our own military-industrial complex.

Those are all things that we'll have to discuss and think about as we come to some conclusions and some recommendations.

I want to thank all three of you for appearing today in front of the committee.

The meeting is adjourned.

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