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Chair

Mr. Dan Ruimy

Standing Committee on Industry, Science and Technology

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• (1530)

[English]

The Chair (Mr. Dan Ruimy (Pitt Meadows—Maple Ridge, Lib.)): I call the meeting to order.

Welcome, everybody, to meeting 30 of the Standing Committee on Industry, Science and Technology.

Today on our last day of witnesses for the manufacturing study, we have, from the Department of Industry, Paul Halucha, associate deputy minister of strategic policy sector, and Gerard Peets, director general, manufacturing and life sciences branch, industry sector.

From the Department of National Defence we have Marc Fortin, assistant deputy minister of science and technology, and we have senior officials from Public Services and Procurement Canada.

Before we move forward, I understand, Mr. Halucha, that you have to leave by 4:30. Is it just you, or does Gerard Peets have to leave too?

Dr. Marc Fortin (Assistant Deputy Minister, Science and Technology, Department of National Defence): I do as well.

The Chair: I know, Mr. Fortin; you have to leave at 4:30 too.

Mr. Peets, are you able to stay afterwards?

Mr. Gerard Peets (Director General, Manufacturing and Life Sciences Branch, Industry Sector, Department of Industry): I am able to stay, yes.

The Chair: Okay, good.

Just so you know, for questions, we will lose those two folks at 4:30.

I see a hand up. Go ahead, Mr. Nuttall.

Mr. Alexander Nuttall (Barrie—Springwater—Oro-Medonte, CPC): Thank you, Mr. Chair.

It's unfortunate that two of our witnesses will have to leave at 4:30. Perhaps we can get this done very quickly.

As you know, in a previous meeting, Mr. Chair, I asked a question regarding carbon taxes and the potential effects on manufacturing, as we're dealing with this study. I know we have two wonderful parliamentary secretaries here who were also at that meeting. I'm not sure if they have any information for us since then that they can provide. If they don't, then I have a motion, but if we can have the information brought forward to us, then I won't need a motion.

The Chair: What are you asking our parliamentary secretaries? I'm not sure.

Mr. Alexander Nuttall: What I asked for before was data related to the effects of carbon taxation, specifically once it is ramped up to \$50 a tonne on manufacturing in Canada. I'm assuming there is nothing.

The Chair: Go ahead, Mr. Beech.

Mr. Terry Beech (Burnaby North—Seymour, Lib.): Thank you for your question from last week.

Greg Fergus and I discussed it. We are still discussing it, so we don't have anything for you today. If that means there is a motion, then I guess there is a motion.

Mr. Alexander Nuttall: Okay, so in light of that, and this being our final meeting on the manufacturing study in which we're working with witnesses, I'll be moving a motion regarding this matter.

Quite frankly, Mr. Chair, I don't care how it's interpreted, if you want it to be done separately—

The Chair: No, go ahead; move your motion.

Mr. Alexander Nuttall: —or as part of this current study.

As a little bit of background on this subject, I actually can't think of an item that's going to cause more questions. If you were a manufacturer and you were thinking about what's coming down the line in the future, the number one question that you would have would be about the effects of a carbon tax by tonnage. What are the effects going to be on my business? What's my carbon footprint? How am I going to manage those new costs to my business?

I obviously can't speak for individual manufacturers across the country, but what I can say is that we can peg what the global cost of this tax will be in 2022 across the country. We can also peg what the difference is between the regimes that exist right now in differing regions of the country.

The Chair: Mr. Nuttall, can I just interrupt for one second?

I know you have a motion. I just want you to be careful, because I know that you were discussing a lot of this in camera before. I just want you to be careful that—

Mr. Alexander Nuttall: And now I'm discussing it in public.

The Chair: If you have a motion, then I'm just saying—

• (1535)

Mr. Alexander Nuttall: This is my preamble to the motion. I can either move the motion and then talk to it, or just give my preamble, move it, and then let us move on and vote on it.

I'm guessing I know where the vote will go, but I still think I should be able to put my two cents forward.

The Chair: Go ahead.

Mr. Alexander Nuttall: We can peg what the cost is going to be in 2022, what the cost is today, and what regimes will be coming into place in jurisdictions like Ontario, where there is a \$20-per-tonne regime that will start in 2019.

According to StatsCan, the carbon footprint for manufacturing and export-related industries is roughly 76.5 megatonnes, which translates into 76,500,000 tonnes of carbon. When we do the multiplier effect, we come up with roughly \$3.825 billion that's going to be levied on the manufacturing industry by 2022.

Of the jobs that exist within manufacturing in Canada, 740,000 are in Ontario and 450,000 are in Quebec, which means that roughly 75%—a little higher, actually—of these jobs are in Ontario and Quebec. There is a \$3.8-billion tax that's going to be levied on them, of which 75% will have to be assumed within these two provinces.

Not just as a member of Parliament who sits on the industry committee for our country, but as a member of Parliament who represents people in Ontario—in a manufacturing town that has had a lot of pain over the years, starting in the 1990s and working on through—I think it falls upon us, if we can't answer the question, at least to start the conversation as to what the effects are going to be down the road.

This is our last meeting to discuss this subject in terms of manufacturing, and I think we have a huge hole in our report. If we are not willing to bring in witnesses to discuss this specific item, I don't know how we can comment on it in a report.

We can give opinions. We can say, "We know there's this issue, but we didn't bother calling anyone to ask them what they thought." We know that the CFIB has conducted a study, which will be out in the next two or three weeks. Why we wouldn't have them come in and bring their data to us, I'm not sure. We know the Canadian Manufacturers & Exporters association is conducting a study. That we wouldn't have them bring in their data to the committee towards this report makes no sense to me.

One of the things I am looking forward to after the testimony from the witnesses is finding out what data they have that's specifically related to this subject. If the government is going to move in a certain direction on taxation, that will encourage behaviours in one way or another. I know they must have data to provide to us as to what the effects of that will be. Otherwise, why bring in a tax in the beginning that you think is going to move behaviours in a certain direction, if you don't have the data to show that this is what is going to happen?

With that, Mr. Chair, do you want me to pass this around?

The Chair: The clerk will take care of it.

Mr. Alexander Nuttall: I just have a quick question for the clerk. Do I need to read this into the record?

I move:

That pursuant to Standing Order 108(2), the Committee conduct a pre-budget study on the effects that the recently-announced Liberal Government carbon tax would have on the manufacturing sector; that this study be comprised of no less

than four meetings to be held at the Committee's earliest convenience; that departmental officials from Innovation, Science, and Economic Development Canada be in attendance for at least one meeting; that the Committee report its findings and recommendations to the Minister of Innovation, Science, and Economic Development Canada no later than February 15, 2017.

The Chair: As I read this, this is actually—

• (1540)

Mr. Alexander Nuttall: I'm listening.

The Chair: You're asking for a separate study.

Mr. Alexander Nuttall: I don't care which way we do it. This motion is for a separate study. I tried to approach it as a part of this study previously, but I don't want to get into that, because I know it was not public.

The Chair: We can approach this in a couple of different ways—

Mr. Alexander Nuttall: I'm fine with whichever way you want to approach it, Mr. Chair. I'm not going to fight you on it if you want to take the two days and it comes back Monday or whatever.

To me it's more about something I think we should be conducting as part of this study. It was made very clear to me that this was not something the committee wanted to proceed with. I just wanted to put this forward and at least have the discussion and get my thoughts out there on the subject matter.

The Chair: What I'll do is ask for unanimous consent to deal with the issue right now. I don't have an issue with that.

Mr. Randall Garrison (Esquimalt—Saanich—Sooke, NDP): I have a point of order, Mr. Chair.

I believe the rules allow that if a motion arises out of the business presently before the committee, it does not require 48-hour notice. If this motion arises out of the failure to deal with this issue in this study, it would seem to me that the motion is in order.

The Chair: No; the way the motion reads right now, it's a new study.

Mr. Randall Garrison: I understand it's asking for a new study, Mr. Chair, but the rules say that notice is not required if the motion arises out of the business before the committee at the present time. What I heard Mr. Nuttall say was that this has been omitted from this study, so it would seem to be part of the business of the committee that is before us.

The Chair: I clarified with the clerk, and from the way it's written, it would be considered as a separate study. However, we can deal with this right now if we have unanimous consent.

Do we have unanimous consent to move forward with this motion?

Mr. Frank Baylis (Pierrefonds—Dollard, Lib.): I think the basic premise is a good one, and it is a big question mark. The only point I would like to make—and I don't know how it could be dealt with—is that we really can't study something until we know the mechanisms that are actually going to be put in place to determine what the impacts would be.

Personally speaking, I think we could consider something in the report that says this is a big watch-out and that this will, one way or another, have an intended consequence on manufacturing. Obviously we want it to have a positive intended consequence, but in life there are sometimes unintended consequences.

I would not have a problem with saying we need to look at this issue. To say we can look at it in the immediate future would not make sense to me, because I do not know the mechanisms that are going to be put in place. I would be open to having a footnote to say that this issue was brought up and identified as something not addressed that will need to be addressed.

The Chair: I'm going to come back to the original question. Do we have consent to actually debate the original motion right now?

We don't?

Then we will take it as a notice of motion and deal with it at a later date.

We are going to move on. As we have Mr. Halucha, who is going to leave at 4:30, and the Department of National Defence—

Mr. Randall Garrison: I have a point of order, Mr. Chair.

The Chair: Yes?

Mr. Randall Garrison: I'm sorry. I'm new to the committee, but I guess I don't understand what kind of invitation was issued. Since the committee is meeting for two hours, the idea that senior public servants who reside in Ottawa would not be available for the full committee meeting is quite surprising to me, from all my experience in committees.

• (1545)

The Chair: They may have other meetings to go to.

Mr. Randall Garrison: With due respect, this is a meeting of the House of Commons, and if we so desire we have the power to compel people to be here. I am not suggesting we do that, but it's the first time in my experience in Parliament that I've seen senior public servants who reside here not making themselves available for a full meeting to which they've been invited.

The Chair: Throughout this whole committee, we've tried to be open and fair in our dealings with our witnesses, and we haven't had an issue. If by the end of this we feel we need to invite them back, then we as a committee can do that. As it stands right now, the longer we spend on this, the less time we have with Mr. Halucha and Mr. Fortin.

Yes, Mr. Lobb?

Mr. Ben Lobb (Huron—Bruce, CPC): In the same vein, I mentioned this in the last meeting as well.

We brought back BDC. I had mixed feelings about that, because probably many of us on this committee had witnesses we would have loved to have appear. One that I thought of is the Huron Manufacturing Association. Their input would have served well. They could have been added on to the last part of this meeting today. They could have appeared the other day instead of the BDC. The Canadian Nuclear Association, although they weren't available the day that they were scheduled, could have been called back again.

The dairy producers of Canada is another group that does tremendous manufacturing and processing, not just in Ontario but in all the provinces. It would have served us well to hear what they had to say.

In some ways it's disappointing that in our final meeting on this study on manufacturing, we have members of this committee who we've heard are not getting orders from the whip, Andrew Leslie. What we've understood is that they're not, but for some reason they didn't want to hear Mr. Nuttall's motion on the impacts a carbon tax would have on manufacturing. That's unfortunate.

Then the final meeting today is scheduled from 3:30 to 5:30. No disrespect to our witnesses here today, but most of them are only going to be here until 4:30.

That's a pretty sorry end to our study, in my estimation. There's a lot more we could have heard. There's the chemistry association, and the testimony that they provided on Monday in regard to the uncertainty over carbon taxes, cap and trade, etc. in all the provinces, and then what the Liberal government is doing with the overarching carbon tax and the uncertainty that it's bringing. That should compel all the people at this table, all parties, to want to hear from people on this very topic.

It is true there are some jurisdictions that haven't implemented their system fully—

The Chair: Mr. Lobb, I need to interrupt. If you want to have your discussion about our witnesses, that's fine, but we were not unanimous on having the conversation about the carbon pricing, which you are referring to, so that's not for debate right now.

Mr. Ben Lobb: My comment is on the overall conclusion of the study. I hope nobody is taking offence to my comments. It's just one member's opinion of some of the lost opportunities that we've had and about outstanding witnesses.

I don't sit on the subcommittee as well, but I'd also be interested to know the ratio of Liberal witnesses who attended or were invited, versus Conservative and NDP. There sure weren't too many on my list that were invited, and I'm sure Mr. Masse feels the same way.

Anyway, I won't belabour it any further, other than to say there are some lost opportunities.

The other one I'll mention again is the nuclear association. I understand they're going to send a written submission in. In the province of Ontario, other than the food processing sector and the auto sector, I would challenge if there is any other sector in manufacturing that is larger than the nuclear association and the nuclear industry. For them to not have a chance to come back and appear and provide the full input is unfortunate.

Maybe they had no interest. I don't know. Regardless, not hearing from people like this.... It's a huge industry. It's a huge growth industry. There are tens of thousands of employees in this sector in the province of Ontario—I'll just speak for the province of Ontario—and they're all good-paying jobs. The university sector as well as the colleges have come on board and are working with the nuclear industry to start to rejuvenate the sector.

It's a lost opportunity on the study. I'm sure that if we have a supplemental opinion to the report, we'll attach some of the missing pieces in there.

• (1550)

The Chair: Go ahead, Mr. Arya.

Mr. Chandra Arya (Nepean, Lib.): Mr. Chair, I will keep it very short.

I agree with Mr. Garrison. When we invite officials, we expect them to spend their full time here. You know, we may not get the opportunity to call them back, and we have three major departments all in one single meeting. The time may be very short for us to cover all three departments.

However, as I said, I'll keep it short. Thanks.

The Chair: It's my understanding Mr. Fortin has travel arrangements. Mr. Halucha has said that he can stay to the end, so it's up to you. We can keep going back and forth or we can go to our witnesses and maximize the time that they're here.

Go ahead, Mr. Dreeshen.

Mr. Earl Dreeshen (Red Deer—Mountain View, CPC): I just want to quickly add to what had been mentioned. Because of the issues that we're having right now, and we've asked certain groups to submit written submissions to us, I'm just wondering if we could expand that somewhat so that perhaps all of those people on all the parties' lists could be invited to do the same, and that then could be included in our report.

The Chair: Notices went out to all the witnesses. Some were able to come and some were not able to come. The clerk has no issue. We can send a notice to submit to the ones who didn't show up, and remember that we do have the link.

Is it still available, the link online for submissions?

Mr. André Léonard (Committee Researcher): Yes.

The Chair: The link online is available as well, but we can definitely direct the clerk to do that.

Mr. Earl Dreeshen: My point was not simply the ones we invited who didn't come, but those suggested by each of the parties at the beginning. If that's what we're saying, then I agree.

The Chair: That's fine. There's no issue there.

Mr. Ben Lobb: Just to be clear, you're saying that invitations were sent out to all the witnesses on the entire list to appear or to provide written submissions?

The Chair: No. Remember that with respect to the clerk's office, we've gone through four or five clerks, and at every step of the way invitations were sent out. I can't ask the clerk right now to tell us exactly who accepted and who did not accept. I couldn't tell you that.

Mr. Ben Lobb: Okay, but I thought when you made your comment, you said that invitations were sent out to every witness.

The Chair: No. What we will do is send out notices to those witnesses who did not show up and encourage them to submit their submissions.

Mr. Ben Lobb: What about the ones who didn't receive invitations to appear?

The Chair: All of our witnesses who were on the list.... We gave in more witnesses than we had time for the study. Remember about... I can't even remember which day it was, but we actually sat down and we reviewed again. I said, "This is where we are at with our witnesses. We're halfway through our study. Let's go through it again and verify that we have the right people for what was missing from the study." I gave that opportunity again.

That said, we still want to be able to get as many submissions as possible. Fair enough? Okay.

Monsieur Fortin, why don't we start with you? Unfortunately, we're going to have to keep it short.

Dr. Marc Fortin: I shall keep it short, Mr. Chair.

Thank you for the invitation to appear. I hope that the information I bring will be useful to your deliberations.

I'm assistant deputy minister for science and technology at the Department of National Defence. My role is to provide the Canadian Armed Forces and the Department of National Defence with the science and technology, the knowledge and innovation they need for mission success.

As adviser to Public Safety Canada, I also am responsible for providing public safety and public security partners across the country with knowledge to address the threats and the challenges that they have in their operations. I submit to you that the context of defence and security is evolving rapidly, that the military platforms are more complex than ever before, that the nature of conflict itself is more complex than ever before.

The changing nature of that conflict and the evolution of the technology will require that we engage with innovators across the country to address those challenges. I lead an organization of 1,300 people across the country, mostly scientists and engineers—some 800 scientists and engineers—who perform research and development in many disciplines from social science to engineering, medical science, and cyber areas. We collaborate with industry and academia. We have partnerships with granting councils, with universities. We give hundreds of contracts every year to industry. We work with allies, the science and technology organizations in our allied countries, to leverage their capacities and capabilities.

The scientists in the organization focus mostly on classified, sensitive, strategic research, and we leverage the knowledge of others in areas that are less sensitive. Our mandate is focused on science and technology to support defence and public safety.

We look forward to working with officials at ISED—Innovation, Science and Economic Development Canada—on the innovation agenda. We do need to build a resilient, robust innovation system to support defence and security objectives in this country. We need to simplify our R and D programs. We need to increase the engagement of non-governmental organizations in delivering innovation and to create a more diversified and resilient innovation ecosystem to support defence and security objectives.

Mr. Chair, I'll stop here and be happy to answer questions.

Thank you.

• (1555)

The Chair: Thank you very much.

Go ahead, Mr. Halucha.

Mr. Paul Halucha (Assistant Deputy Minister, Strategic Policy Sector, Department of Industry): Thank you very much, Mr. Chair.

I'll be equally brief. I'll abridge a few of the comments.

It is a great pleasure to be here before the committee on your final meeting of the discussion on Canada's manufacturing sector.

[Translation]

As Assistant Deputy Minister of the industry sector, I lead a team that is responsible for supporting innovation and competitiveness for Canada's manufacturing sectors. This includes aerospace, defence, space, automotive, life sciences, steel, chemicals and consumer products.

We also administer the industrial technological benefits policy related to military procurement as well as covering the investment review division.

Our work is done in collaboration with other sectors of Innovation, Science and Economic Development Canada, as well as other government departments.

[English]

As the committee has learned over its study, this is a sector that makes a significant contribution to every region of Canada's economy across exports, R and D, and jobs.

[Translation]

However, manufacturing has been through a challenging few years. Canada lost a large number of manufacturing jobs, firms and investment during the 2008-2009 global recession. Despite these challenges, manufacturing employment has been stable since 2009 at close to 1.7 million people, or 10% of total employment.

While its share has fallen, manufacturing accounts for 10% of Canada's gross domestic product. We have seen a strong rebound in this area, but it remains below pre-recession levels.

[English]

Canadian manufacturing exports have climbed steadily since the recession. In 2015, manufacturing exports totalled \$325 billion, an increase of 9% compared to the previous year. For all the discussion of Canada as a resource nation, manufacturing represents nearly 70% of Canada's merchandise exports, consistently higher than energy, mining, and agriculture exports combined.

The committee's work on the future of manufacturing has been of keen interest to the department. We have been closely following the witnesses' testimonies, and it has been especially timely, given the department's priority on the innovation agenda and the work our minister has been undertaking over the past number of months.

I'd like to recap some of the big themes very briefly that were brought up during the hearings that are important to the future of manufacturing in Canada and the work of the department.

• (1600)

[Translation]

First, access to talent.

Second, growing companies.

[English]

The third is focusing on emerging technologies. The fourth theme is accessing new markets through trade.

There are significant challenges facing the manufacturing sector, and they touch on the mandate of multiple federal departments. From ISED's perspective, they are also an important area of focus for the minister's innovative agenda.

The department continues to work with other federal departments and industry to support our ministers in delivering on the commitments outlined in their mandate letters.

I look forward to the discussion and the questions. Thank you.

The Chair: Thank you. That was short.

Finally, do we have any opening remarks from Mr. Gray?

Mr. Desmond Gray (Director General, Office of Small and Medium Enterprises and Strategic Engagement, Department of Public Works and Government Services): Yes, you do.

The Chair: Okay.

Mr. Desmond Gray: Thank you very much, Mr. Chairman. My name is Desmond Gray, and I'm the director general of the office of small and medium enterprises and stakeholder engagement in the acquisitions branch of Public Services and Procurement Canada.

As you all probably know, the Government of Canada does expend significant resources annually for the goods and services it buys to meet the needs of Canadians. Federal procurement accounts for about 1% of Canadian GDP, so it's quite significant. On average, this translates into about \$18 billion of procurement a year. This ranges in the goods and services that we buy from things like food, clothing, and office supplies all the way up to ships, tanks, and aircraft, which is a very wide range.

Of this \$18 billion annually we spend, \$16 billion is spent with Canadian suppliers. Last year, for example, our department issued over 23,000 contract documents. Of this amount, \$6 billion was spent on DND requirements, and of that \$6 billion, \$4.2 billion was for goods.

[Translation]

Canadian federal procurement is based on the core principles of fairness and transparency. Our laws, regulations and international trade agreements generally require that government purchases be put to the open market for public bids.

Competition promotes innovation and the best value. There are some exceptions to this, provided for in the government contracting regulations, such as when only one supplier exists, or there is a robust justification to source to a single supplier. This may occur mostly in the defence context, where interoperability with allies and national security are factors at play.

[English]

Canada has for some time leveraged defence procurement for industrial benefits, and recent changes have brought broader application and more rigour to that work. A core element of the industrial and technological benefits approach is a rated and weighted value proposition.

As part of the overarching goal of getting the right equipment and services for the Canadian Armed Forces, this is a powerful lever for the government, because it requires bidders to compete on the basis of meaningful economic benefits to Canada associated with each bid. It is a weighted and rated assessment, so bidders who provide quality value propositions will stand out. We know that sustained spending over time not only strengthens the industrial base, it supports research, development, and innovation, and export capabilities.

I think you all know that unlike regular goods and services we provide or procure, defence equipment is rarely standard. Even equipment described as "off the shelf" may need to be customized to meet military needs. Armoured and non-armoured military vehicles, for example, carry sophisticated equipment, and they must be able to withstand weather conditions and circumstances that are unlike those encountered in the civilian world.

The office of small and medium enterprises and stakeholder engagement, the organization I lead, was created in 2005 to specifically address the needs and perspectives of small and medium-sized enterprises selling to the Government of Canada. We assist SMEs, identify procurement opportunities, and help remove obstacles to their participation. Today approximately 35% of all of our PSPC contracts are awarded to SMEs.

Finally, I'd like to tell you a little about one other program we deliver, and it's called the Build in Canada innovation program. We believe this is a unique program that helps Canadian companies commercialize their innovations by buying and testing them in the federal government.

This program was created to bolster innovation in Canada's business sector. The BCIP helps companies, including small and medium enterprises, to bridge the pre-commercialization gap for their innovative products and services, while providing the federal government departments with opportunities to access innovation and innovative solutions. We do this by awarding contracts through an open, transparent, and competitive process with pre-commercial innovations by testing and providing feedback to these entrepreneurs about the performance of their products; by providing innovators with the opportunity to enter the marketplace with a successful application of their new product or service; and by covering the cost of the innovation and managing the procurement process on behalf of the federal government departments.

As of October this year, we have awarded 209 contracts to innovative Canadian companies for a total value of \$74 million, and most recently we have been in the process of reviewing the BCIP program. We are looking to determine if it meets the goals that were originally set for it and if the program could be improved to deliver greater benefits and value to federal departments and Canadians.

[Translation]

Thank you for your time.

● (1605)

[English]

I appreciate the opportunity to appear before you, and I and my colleague will be pleased to respond to any questions.

The Chair: Thank you very much.

We're going to jump right into questions with Mr. Baylis.

I'm just reminding everybody that Mr. Fortin will leave at 4:30.

Mr. Frank Baylis: Mr. Halucha, are you leaving at 4:30 as well?

A voice: No.

A voice: He's staying.

Mr. Frank Baylis: Okay. I planned to start with you anyway.

Do you have a question for Mr. Fortin? He's leaving at 4:30, so what I'll do is pass my time to Mr. Chandra and I'll take the next slot.

Mr. Chandra Arya: Thank you.

Mr. Fortin, I know you are committed to involving the private sector in the development and commercialization of technologies. They've done that at DRDC. Three times I have asked our defence minister not anything about F-35s, the CF-18, or Syria, but about what steps he is taking to commercialize the technologies getting developed in DRDC and how he is going to engage the private sector in commercializing these technologies. I have not asked the minister this question, but I want to ask you what we can do to promote the C4ISR industry in Ottawa.

Dr. Marc Fortin: Thank you for the question.

As I said in my opening comments, my role is to support innovation in science and technology in the Department of National Defence. It is to provide the Canadian Forces with the best technologies. They need a tactical advantage, a technological advantage, when they are in operations, so my role is to give them the best technologies. It is also to work with procurement folks, whether in DND or at PSPC, to identify the best technologies on the market and to provide advice on what will work in the hands of operators in the field.

The Department of National Defence does not have an economic mandate, an economic mission. We do support companies. We have a program called the defence industrial research program, whereby we cost-share with industry the risk of doing research and development. In fact, on the web at the moment we have a program that allows this.

Mr. Chandra Arya: Is there any program that formally brings in the private sector to commercialize the technologies being developed?

Dr. Marc Fortin: Again, we don't have an economic mission, but what we do, because of our science mission, is reduce the risk of companies doing research to develop solutions. It is our standard policy to leave the intellectual property with the companies that have invested in research and development so that they can commercialize their products.

Mr. Chandra Arya: Thank you, Mr. Fortin.

Mr. Gray, you talked about the BICP. My understanding is that this year you are investing less than \$100 million there, compared with the billions in software dollars we give in grants and other supports to the industry. It seems to me that the amount for BICP, which I consider one of the best programs, is very limited.

I support free trade agreements, bilateral and multilateral; however, a lot of the contracts you award are beyond the scope of these agreements. For the contracts you award outside the scope of these trade agreements, why don't you give preference to Canadian small businesses? You said 35% of it goes there, but why don't you formalize it and set up a mechanism so that Canadian businesses are supported?

Mr. Desmond Gray: That's a very good question. I'll respond in two ways. First, I'll start by responding very briefly about what BICP is doing—

• (1610)

Mr. Chandra Arya: No, I know about BICP, but I want to know more about what you can do for Canadian small businesses in

awarding contracts that are outside the scope of all the trade agreements.

Mr. Desmond Gray: I understand. The answer, I guess, is to identify how the trade agreements impact and what the opportunity is.

For example, in our own department, even though we have the trade agreements, there are certain exemptions that are permitted. For example, when we have what we call a national security exception request—this is generally from DND—we can exempt or put a procurement outside of the requirements of the trade agreements. This allows us to operate—

Mr. Chandra Arya: No, I understand. When you do that, why don't you formalize it in such a way that Canadian businesses benefit from it?

Mr. Desmond Gray: I would say that the program itself, the NSE exemption, is a formalized process in our procurement policy. There's a specific process to it, and it does permit specific requirements to be exempted from those trade agreements.

Mr. Chandra Arya: Mr. Halucha, you talked about listening to the witnesses in our current study and you talked about the talent and the access to market, but I'm quite surprised that you didn't mention the lack of access to funding, both for commercialization and for start-ups in manufacturing.

In my view, that is one of the greatest impediments to developing the manufacturing sector here. During the last 10 years, BDC funded only 1,800, for an average of 180 start-ups per year in manufacturing, which is very low. With medium-sized businesses getting smaller and smaller, we need more manufacturing start-ups. I was quite surprised to see that you didn't think that was one of the things that is emerging here.

Mr. Paul Halucha: I didn't highlight that as much, given the brevity of my remarks, but it absolutely is of central importance. Access to capital, the ability to have capital, especially at the point of pre-commercialization to try to scale up, is a perennial problem of firms, and certainly it's on the top of the list of issues that they bring forward.

I think that's partly why the government has invested in the venture capital fund, the VCAP fund, which has resulted in a 41% increase in the number—

Mr. Chandra Arya: No, no, I know about VCAP funding. It just made \$350 million, which you have used to give to the fund of funds, which in turn have raised it to \$1.3 billion and invested in 126 companies, but, trust me, a very small amount of that is going into manufacturing.

Mr. Paul Halucha: You had BDC appear last week?

Mr. Chandra Arya: Yes.

Mr. Paul Halucha: I think they would have indicated that they have expanded the amount of capital that they have been providing to manufacturing companies.

Mr. Chandra Arya: No, not from VCAP. Let's not confuse them.

Mr. Paul Halucha: Sorry, no, not from VCAP, just from generally BDC funding.

Mr. Chandra Arya: Yes, that would be in the lending they do, the investments they do on their own in venture capital and the VCAP.

There are three different segments, and maybe, in all the three, I should say that the amount that is going into manufacturing is quite small. Even the amounts that are going in are basically going into companies that have been around for quite some time and have a good track record.

What we're talking about here is support to start-ups in manufacturing.

Mr. Paul Halucha: You're talking about higher-risk ventures.

Mr. Chandra Arya: Yes and no. I mean both higher-risk and young commercially viable ventures. There are 180 companies—

The Chair: Mr. Arya, I'm going to have to cut you off there.

We're going to move ahead to Mr. Dreeshen.

You have seven minutes.

Mr. Earl Dreeshen: Thank you very much, Mr. Chair

Thanks to our witnesses.

In previous Parliaments, I had the opportunity to be part of public accounts during the study of military procurement, and we were talking about things like F-35s. There is certainly a discussion about how Canadian companies would have been impacted by being part of that particular process, and I know that continues.

I learned a lot about full life cycles and the conflicts between what the Department of National Defence and the Auditor General would say what that should be, as well as the PBO. A lot of interesting things took place on variants of the F-35s.

Mr. Fortin, I'll start by asking you these questions, and then maybe I'll get another opportunity later to ask the other gentleman.

After the defence procurement strategy was unveiled, the Defence Analytics Institute was established as an important pillar of the defence procurement strategy, because it's difficult, if not impossible, to make good procurement decisions without that clear understanding of Canada's complex and diverse defence industrial base. The DAI was designed because there was no source, either in government, academia, or the private sector, for collecting knowledge and data on Canada's defence industrial base. I'm just wondering what is happening with the DAI today.

•(1615)

Dr. Marc Fortin: Mr. Chair, I can't answer that question. I'm responsible at National Defence for science and technology, so I don't have any dealings with that committee.

Mr. Earl Dreeshen: If that's the case, then I just wonder if somebody in the department could report on the recent activities of DAI. I think it's important, because we're dealing with the industry that is associated with them, and once we know what is being done there, we can ask the question about how advising the minister in these areas would be significant.

The defence procurement strategy is a comprehensive strategy that requires many moving parts, and another part was industrial and technical benefits policy, which requires bidders to compete on the basis of the economic benefits to Canada associated with each bid and to undertake business activity in Canada equal to the value of the contracts awarded. Previously, winning bidders were selected on the basis of price and technical merit. Now the government also assesses the bidder-proposed economic value proposition to Canada. The value proposition guide is a starting point, to be reviewed and evolved over time through engagement with industry, and as government gains experience with the approach, it provides flexibility and discretion in its application.

I'm just wondering if you can tell us how that is being used today and assess the effectiveness versus the old offset model.

Dr. Marc Fortin: I'll ask for my colleagues to provide answers to that question. Being in charge of science and technology, I am at arm's length, to some extent, with procurement, because the advice we provide informs decision-makers on the right choices for being smart buyers, if I can use that word, and we're not directly involved in procurement.

Mr. Paul Halucha: I'm pleased to respond.

On the value proposition, as you know, we moved from an industrial regional benefits policy to an industrial technology benefits policy. The difference around the value proposition is that we've moved the requirement on those from whom we are procuring goods to an earlier point in the process. We're asking them to provide us with their strongest industrial benefits to Canada and then making that a weighted criterion in the determination of who wins the procurement.

The advantages are obvious. Previously it was a pass-or-fail mechanism: you could fail on your ITBs or you could pass on them, but it wasn't weighted, and there was an incentive to effectively provide just good enough ITBs. Now, with a competitive model, we've incentivized those who are seeking to get major procurements from the Government of Canada to bring forward their best value propositions to Canada. We assess that now much earlier in the process so that it's a weighted criterion in the immediate and first decision, which obviously strengthens the opportunities for Canadian businesses.

Mr. Earl Dreeshen: Thank you.

Mr. Fortin, exactly what is your role, then, as the assistant deputy minister for science and technology? Perhaps you could give us a bit more of an understanding of what is expected of you, what information you've been given by the minister, and your mandate. That would perhaps help us in our discussion.

Dr. Marc Fortin: Absolutely.

My role is to inform the military partners—the Canadian Armed Forces, the various environments, army, navy, air force, SOFCOM, and so on—of new technology developments that might have an impact on their military capabilities.

For example, if there's a new threat of, say, a new laser or a new cyberattack tool that the Canadian Armed Forces might be affected by, my role is to inform them of those technology developments. It is also to help develop the technologies to support the development of those military capabilities, and also to inform about the technologies that are presented to the department by various companies as to the robustness of the claims that are made by those companies, the validity of those claims, the quality of the technology, the maturity of the technology, and so on. It's technology advice.

• (1620)

Mr. Earl Dreeshen: Right. From that point of view, when you see something that is required, is it the case that you may well have to go outside of the country in order to get that scientific knowledge and to go to other allied countries to advise what should happen with the department?

Dr. Marc Fortin: Our first choice is to work with Canadian partners. We spend in Canada approximately \$3 billion on research and development in our universities. This is a huge investment made by the Government of Canada.

If we can leverage the knowledge that exists in our universities and our companies, then that is to our benefit. We cannot ignore the fact...and I apologize for leaving at 4:30, but the invitation I had received was until 4:30. I'm leaving tonight to go to Washington to leverage the \$60-billion investment in research and development that the U.S. is making in defence. It's an enormous investment, and our participation in projects with the United States, the U.K., Australia, and other allies brings back to Canada military capabilities and technologies that we would not have access to because our investment is relatively modest.

Mr. Earl Dreeshen: Thank you.

The Chair: Thank you.

Mr. Garrison, you have seven minutes.

Mr. Randall Garrison: Thank you very much, Mr. Chair.

Thank you, Mr. Fortin, for clarifying that your invitation was for one hour. I appreciate that.

As a member who represents a riding that's the home of the Canadian Pacific fleet and also the Victoria Shipyards, I was keen to be here today in this committee, although I have to say I've not felt keen to be in the industry committee before.

Since you do have to leave, I want to start my first round of my questions with you, Mr. Fortin.

When the national shipbuilding strategy came out, the discussion was that for the ships to be designed, the preference would be for an off-the-shelf design. We all know there's really no such thing as an off-the-shelf design, but I wonder with the technology whether there aren't some good reasons why we might want to look at a Canadian design, apart from timing, rather than an off-the-shelf design. For the benefits of developing technology in Canada, it would seem to me there aren't off-the-shelf designs in Canada for the ships we're talking

about, and those elsewhere would be unlikely to include Canadian-developed technology in their designs.

Dr. Marc Fortin: Thank you for the question. It is a good question.

There are two elements. There are the platforms themselves—the ship, the steel, if you wish. There are also all the technology components that go on the ship: sensor systems, radar systems, fire control systems, so on and so forth. We have Canadian companies that are internationally well renowned in the quality of their technology and what they can bring. Part of my role is to de-risk the development of those new technologies such that they can be offered for insertion on those platforms when those platforms are built.

New radar technologies are needed to defeat new threats that our adversaries are deploying. We have Canadian companies that are well positioned and that we are helping through contracting with them or our interactions with them—technologies we transferred to them—to be competitive in the procurement process that our colleagues at PSPC are running. Our objective is to help those companies develop the technologies such that they can be successful for insertion.

Mr. Randall Garrison: People think of the shipbuilding strategy as Halifax and Vancouver, but I'm in Victoria, and we actually have the good jobs, because Seaspac does the hulls in Vancouver and it does the filling of the hulls with the technology in Esquimalt. I'm quite happy to hear that there is attention to that, given the off-the-shelf design.

I know this gets between you and procurement, but does that also include provisions to ensure that if we do select an off-the-shelf design, that technology is transferred to Canada so that when it comes to maintenance of those systems we won't be beholden to a foreign company that might have other priorities or be under some restrictions by a foreign government?

I know Britain ran into this in some of its technology. When it wanted to go to Afghanistan, other countries suggested that the end use wasn't acceptable to them and therefore certain kinds of maintenance and parts couldn't be supplied to Britain.

I wonder if we have that same concern here and whether we're working to develop our own capacities.

• (1625)

Dr. Marc Fortin: We're developing our capacities to be able to equip and, from my perspective and my mandate, we're developing those capacities to provide the Canadian Armed Forces, including the navy, with cutting-edge technologies. In terms of bringing foreign technologies to Canada, I'll have to defer that question to my colleagues.

Mr. Sylvain Cyr (Director General, Land and Aerospace Equipment Procurement and Support Sector, Department of Public Works and Government Services): Maybe I can try to answer. Typically what happens is we would work with our colleagues in ISED, and through the value proposition or ITB requirements we would try to leverage as much as is doable, taking into account the capabilities, obviously, of Canadian companies. What can be maintained in Canada would be embedded and be part of the selection criteria.

Mr. Randall Garrison: I understand, and I'm concerned about economic benefits, but I'm raising a national security concern about technology here, so maybe....

Mr. Paul Halucha: I think the answer is that you're absolutely right. That's the first principle in terms of these procurements: ensuring that we obtain the necessary intellectual properties so that we can maintain the ships ourselves. In a worst-case scenario or a theoretical scenario when we were in a state of war, the last thing we want is the company that is responsible for maintaining part x of the ship to be on the other side of the battle.

Maintaining that capability in Canada and having that access through getting intellectual property rules right in the procurement process is a first principle. It's linked to sovereignty and, as you point out, our national security.

Mr. Randall Garrison: Given the new government's emphasis on peacekeeping, we might, on the other side in battle, be more likely to end up in the situation Britain was in, which was not that the other company was on the other side in battle but....

Mr. Paul Halucha: No, I was depicting an extreme, hypothetical

Mr. Randall Garrison: I think a more realistic one is that other countries that have end-use requirements on their transfer of military technology might try to exercise those in ways that would restrict our sovereignty and—

Mr. Paul Halucha: They could even simply just raise the cost, because they are the only supplier in the market.

Mr. Randall Garrison: Right.

Mr. Paul Halucha: You need the flexibility and the ability to go elsewhere to shop.

Mr. Randall Garrison: Southern Vancouver Island has become one of the centres of high technology. I know everybody claims to be “the” centre of high technology. I won't make that claim today, but I've heard locally from people that despite the efforts of all the groups to include them, they find it hard to get the information they need to be ready to step into a lot of these programs. In terms of companies that aren't located here in Ottawa or aren't part of the big networks, what specific things are being done to help those that are located in my riding to participate in technology development?

Dr. Marc Fortin: I can take a first shot at the answer on this one.

I would agree that we need to be better at reaching out to small technology companies, and I'd say academia as well. In the last two rounds of calls for proposals, we have done business differently. We've changed our business model.

You may be familiar with DARPA in the U.S., the Defense Advanced Research Projects Agency. They put out those calls for

proposals. Essentially, they put the problem out there, and they ask for any company, innovator, or academic—anyone who has something to contribute to solve that problem—to come forward.

We recently held workshop days at which we invited anyone to address a set of topics we had on surveillance in the north. It is a priority for the Minister of National Defence. It is in his mandate letter that we support Canadian sovereignty in the north. We've asked for anyone with any piece of technology or solution on that to come forward, and we've had a very successful engagement with, I'd say, a more diversified set of innovators.

The Chair: Thank you very much.

It is 4:30, so I guess you can leave, Mr. Fortin.

We are going to jump to Mr. Baylis.

Mr. Frank Baylis: I have just a quick question before you leave. I understand your role in looking at science and technology. Is there anything formalized that pushes you to specifically target Canadian technologies and Canadian companies?

• (1630)

Dr. Marc Fortin: There is the question of national security, to begin with. As I said earlier, most of the research that is done by the 1,300 people in my organization is focused more on classified and sensitive research areas, where it's not easy to share with other countries, so there is a national security imperative to begin with.

Otherwise, I am not aware of a regulatory requirement to force us to do that.

Mr. Frank Baylis: Could there be such a requirement that we could mandate? Could we, effectively, structurally formalize that you must drive that towards Canadian companies?

Dr. Marc Fortin: The danger in setting up that policy would be that, Canada being a reasonably small player on the international scene, it would restrict access to technologies that are game-changers for the Canadian Forces, so we would need to balance—

Mr. Frank Baylis: Presently, we have nothing. We could theoretically structure something. Can you think of something we could do to mandate you to drive that way?

Mr. Paul Halucha: I think the risk of this is that you can design anything hypothetically. The challenge, though.... The Canadian companies that grow to scale, and beyond scale, and create the best jobs in Canada, are those that reach export opportunities. We'd have to be careful and look at how other countries would respond to that. We are a massive export nation, as you well know, so we need to think about what types of rules we want to face in foreign markets.

Mr. Frank Baylis: Fair enough.

Mr. Paul Halucha: Taking actions in Canada that precipitate counteractions in other jurisdictions....

Mr. Frank Baylis: You just mentioned these massive sums of money that the Americans put in, and they put it right there in these trade agreements. From soup to nuts, it's national security for them, so they're busy doing it. Our European partners do it. Should we be shy to do it? I understand you're saying that we have to be careful, but do we do nothing?

Maybe all three of you could answer that.

Mr. Desmond Gray: I would follow up on the comment. It's interesting. It's a very timely comment, I think.

One of the things we've been doing recently, as part of our review of our Build in Canada innovation program, is working with our colleagues in ISED and NRC to look at how we can expand this program and make it more effective exactly in the ways I think you're talking about.

For example, we have gone down to the United States. DARPA was mentioned, and it's a great example of a very innovative program. SBIR, the Small Business Innovation Research program in the United States, which has been around for almost 40 years, has become a huge engine of economic growth. How do they do that? They're investing. They have basically created a set-aside program for 11 federal departments in the United States. An act of Congress requires the top 11 federal U.S. departments to set aside 2.5% of their R and D budget—the last few years it's been 2.5%; next year it will be 3.2%—and in the United States that's \$150 billion. They are making significant investments in what we call early-stage, phase I, and phase II R and D.

This is all being done in support of the programs and the mandates of these 11 departments. They have to actually invest in their programs. The strength of their program is that they've created a very small infrastructure. The actual decision-making.... I think the challenge function was mentioned a little while ago. This is exactly how many of those departments do it. They post public challenges to get innovative ideas to come in from right across the United States from academia and from all the different institutions.

Mr. Frank Baylis: That's from both academia and small business.

Mr. Desmond Gray: Absolutely.

Mr. Frank Baylis: But they are driving that to their....

Mr. Desmond Gray: You're absolutely correct.

One of the key characteristics of SBIR is that it's a phase one and phase two process. It goes from what is called TRL 1, Technological Readiness Level, at the very beginning, the first phase, which allows an investment of up to US\$150,000 usually for about six months, and if that then is evaluated and found to be effective, they will then

decide to invest on the second phase, which could be up to another two years and up to \$1.5 million.

Mr. Frank Baylis: So they're inching their way up, and no one—

Mr. Desmond Gray: They're bringing their way forward.

Mr. Frank Baylis: —and no one's going to scream blue murder if some little company gets a \$150,000 contract—

Mr. Desmond Gray: No.

Mr. Frank Baylis: —but then they can weed them out when they see this one now has something—

Mr. Desmond Gray: Correct.

Mr. Frank Baylis: —and we're going to bet heavily on it.

Mr. Desmond Gray: Absolutely right.

Mr. Frank Baylis: What stops us from doing that here?

Mr. Desmond Gray: First of all, we're looking at this program with our colleagues at ISED and NRC. We've been examining the benefits and the opportunities, and that work continues. I think it's fair to say that as we look forward, we are looking at ways and considering options. For example, in the American model, as they evolve it through phase one and phase two, next year they'll probably spend somewhere around \$3 billion in this program. They're constantly measuring their results to make sure it's valid.

They had to go back to Congress in 2010. It had been a long time since they had been reviewed, and when they went back to Congress, because of the detailed analytics they had done, Congress not only said they would recapitalize the program but directed them to get more money. Clearly, they see a lot of benefits.

The opportunity coming out of that from phase one to phase two is around the pre-commercial point, and of course, as you talked about, in Canada and the United States it's what they call the valley of death between the R and D investment and bringing it to market. This is where venture capitalists and angel investors see high risk and are looking for something that is truly marketable and ready to go forward.

The Americans have produced a program by leveraging their public procurement to achieve this kind of R and D investment, and a key characteristic of this requirement is that it must have a commercial component. In other words, it can't just be pure R and D. It must be able to move forward.

• (1635)

Mr. Frank Baylis: And that's all the SBIR program that you're—

Mr. Desmond Gray: That's the SBIR.

Mr. Frank Baylis: Would it be possible for you to provide in writing a summary of the big themes of this program? You can submit it to the clerk. Would it also be possible that you might provide some ideas of how we might use something similar?

I'm of the school of thought that if it's a good idea, take it. Why reinvent the wheel if this thing seems to be working very well for them?

We've heard time and time again about problems of procurement from small and large companies, quite frankly, that have come before us. We're here to help Canadian companies, pure and simple. As long as we can do it within the rules and we can find best practices elsewhere, I think it's an opportunity for us.

Can you do that?

Mr. Desmond Gray: Yes, we can. We'll work with our colleagues in ISED who have been very active and are very strong supporters with us and NRC, and I'm sure we can bring forward a submission to the committee.

Mr. Paul Halucha: We'll do it as well just from perspective of firms, again going back to the consultations that the minister held on the innovation agenda this summer.

One of the key considerations that came forward was the importance of that first sale. Having the government as a buyer provided advantages to Canadian firms when they were seeking foreign contracts. I think it's absolutely critical. We heard from almost every type of industry, from small companies in high tech to larger, more established firms, that if you weren't selling to your own government, it becomes a real challenge in terms of breaking into foreign markets. From our perspective, that's a really key advantage of such a program.

The Chair: Thank you.

Before we move on to Mr. Lobb, we have Jeff Waring, and if I have this right, you're senior director, industrial technology...

Mr. Jeff Waring (Senior Director, Industrial Technological Benefits Branch, Industry Sector, Department of Industry): I'm with the industrial technological benefits branch at industry sector with Paul Halucha at the innovation, science and economic development department.

The Chair: Thank you. Welcome.

Mr. Lobb, you have five minutes.

Mr. Ben Lobb: Thanks very much.

That's for coming.

Mr. Gray, what are some of the complaints that businesses would have dealing with your department? Can you just give us an idea of some of the complaints people might have?

Mr. Desmond Gray: I should tell you that we go out and do detailed surveys every three years with suppliers all across Canada. The most obvious complaints are that we're too slow; our procurement process is too complex and difficult to understand, especially for small and medium enterprises; and payment is not always on time, which is a very hot issue, because, especially for small businesses, cash flow is critical, the number one issue.

Some other challenges are that they don't understand the process; they're not sure where to find the opportunity; they find our process bureaucratic, even if they understand it or choose to submit a bid; or they're found to be non-compliant because of a technical error.

This is all part of what we do. It is why we were funded as the office of small and medium enterprises. We go out all across Canada. We have six offices in every major region in Canada and we're constantly providing seminars, going to associations. We do about 1,100 trade shows, meetings with associations. All across Canada, we are trying to give people information about how to easily access opportunities through our website. It's an automated, simple process, with simple tools to access it. The challenge is to make them aware, in a very quick and easy way, of how to find opportunities. Clearly, it costs money and time.

Of course, larger businesses often have people who are specialized in responding to RFPs, whereas small companies do not. In Canada there are 2.5 million businesses, of which almost one million are one or two people. They just don't have the overhead. Our job is to make it simple, remove those barriers, and give them the tools, which is what we continue to do.

● (1640)

Mr. Ben Lobb: When I was on the health committee looking at electronic health records, I talked to a few software companies, and they didn't even want to touch the government. It was too much. They could do something else for more money, with fewer problems. I think this sometimes stifles innovation, whether it's federal or provincial.

Mr. Desmond Gray: You're absolutely correct. The other thing is that we want to expand the base of suppliers. I think diversity was mentioned earlier. We want to increase the diversity of suppliers and bring new suppliers in. That's also part of it.

For instance, we're looking at simplifying. We have a whole initiative on procurement modernization in our department. Some of the key issues are how to simplify the process, how to simplify our policies, and how to make ourselves more accessible both to other government departments—because we serve other government departments—and to the supplier community.

Mr. Ben Lobb: Let's say something is awarded to a firm, and they're going to subcontract it out. They aren't going to do the whole job, but they may do some of it or part of it or whatever. This goes back to your getting the payment to the subcontractors. Are there terms you mandate—30 days, 45 days, or whatever—that the company awarded the contract must pay the subcontractor by? Is there a way you can monitor this?

Mr. Desmond Gray: There's a rule. We have a rule set by Treasury Board. I know we pay. We hold payment to the prime for 30 days. That's to make sure in part that they have paid their subs. As you can imagine, we don't get involved in the relationship between the prime and the sub, because that's a business relationship. I'm not aware of anything about contract conditions.

Mr. Sylvain Cyr: Just as Des was saying, we don't get involved in the relationship between the prime contractor and, quite often, the multiple subcontractors that exist, because it would be a slippery slope whereby if anything were to go wrong we would be told that it's because of our involvement. For this reason, we don't do it.

Mr. Ben Lobb: Late at night when I can't sleep, I sometimes go on MERX and shake my head at these things. It's probably a sickness more than anything else. I looked at an opportunity for a snow removal contractor to move snow around the East Block, and there was no contractor in my riding who would touch it, even for \$1 million, because of the level of security clearances you have to have, the liability. There are only about two companies in this country that would even want to do something as simple as snow removal. I looked at that and it kind of summed up the problem that's plagued governments for decades.

What can we do to try to make this better?

Mr. Desmond Gray: I think you have it.

The Chair: Please be brief.

Mr. Desmond Gray: I was just going to say you voiced something we have been hearing for quite a long time. It is part of one of the things we are trying in procurement modernization. This reflects perhaps a certain historical viewpoint about procurement and managing risk. It's very easy to manage risk. However, you may over-manage it so that you increase costs and limit access. That means you limit competition.

Ultimately, even when you put those requirements in, it's a cost that has to be borne by the supplier. We have a supplier advisory committee made up of representatives from Canadian industry and major associations. They've raised this issue with us, and we're investigating. We're doing work right now as part of that review to see how we can find a better balance of risk and performance to address this question.

The Chair: Thank you very much.

We're going to move to Mr. Longfield. You have five minutes.

Mr. Lloyd Longfield (Guelph, Lib.): Thanks, Mr. Chair.

Thanks to those witnesses who have come in today.

I'm going to go on a line of questioning about our relationships with the provincial and territorial governments, where there are some initiatives in Ontario. Invest in Ontario has identified defence and aerospace as a key sector for us to be working on.

Do you work with the provinces and territories to say that if it's important for them, then it's important for us as a sector? Do you work across orders of government? I think a manufacturing study could be very important.

● (1645)

Mr. Jeff Waring: I'll start this off by saying that when we launched the industrial and technical benefits policy two years ago, we did reach out to all of the provinces to explain the process by which we were looking to leverage economic benefits and to also inquire as to whether or not there were priority areas of capability that they wanted to see supported on a procurement-by-procurement basis.

This is certainly something that we are actively engaged in on the shipbuilding contracts as well, just because of their size. There's a lot happening on both coasts with regard to shipbuilding. We do have open door policies with the provinces, of course, and we look to the regional development agencies, which are now part of the Department of Innovation, Science and Economic Development, to keep that dialogue open and to feed in those kinds of intelligence from the provinces.

Mr. Lloyd Longfield: Is that something in our study that we could look at as a new development, or is that something that has been going on for a long time?

Mr. Jeff Waring: It's something that, when we transform the industrial and technological benefits policy, is a lot more strategic. It has been going on for two years. In the past, it may not have been as open to those kinds of discussions because it was more of a blunt instrument. It was more one size fits all.

Mr. Lloyd Longfield: Good. Thank you.

May we hear from procurement, please?

Mr. Desmond Gray: The answer is that we are working with the provinces and territories, and we're doing it in two ways that immediately strike me as relevant.

One of them is just for the work we do in my group—the office of small and medium enterprise—where we regularly engage with different provincial entities. For example, when we go to Toronto or any major urban centre, we will work with them and have a day with industry. We bring industry in where all the levels of government are working together to promote, share a table, and give presentations. It just makes it cost effective.

Industry doesn't care what level of government you are. What they want to know is, what's the opportunity? We are working closely to do that and to make sure we get our respective opportunities out there.

The second one is that more recently, in 2015, our minister was given the authority through an order in council to offer the other provinces and territories access to our procurement instruments. What this means is we that can now, in working with the provinces and territories, give them access, so that if they wish to use our instruments, instead of their doing multiple investigations on their own, we can now bring it all together.

We've started doing that. We're creating the legal agreements with them and creating the relationships. I think it is advancing very well, and we intend to grow it, but it's another way that we can work in the confederation. We can work more effective horizontally.

Mr. Lloyd Longfield: Terrific.

I'll put a plug in for chambers of commerce. My background is in the chamber network. We used to have those sessions with the orders of government, and they reached a lot of small and medium-sized businesses in Canada.

Yes, Mr. Halucha, you had your hand up.

Mr. Paul Halucha: I just want to add a couple of points.

I agree with you. The relations with the provincial governments on economic matters are extraordinarily important. We want the same results. We want growth and we want strong companies, to the extent that you can bring resources together in combined efforts. If you look at programs we do, such as the automotive innovation fund, very typically you'll see that there's a federal support that we provide through that fund, and the provincial government provides matching funding, or vice versa. In the evaluation process, we are typically very well aligned when providing it.

I think from a structural perspective a really important change the government made was moving the original development agencies into the ISED portfolio, which I think really has enhanced that alignment. It has strengthened the type of intelligence that you've suggested would come from that in a really tangible way.

Mr. Lloyd Longfield: Thanks.

We're coming short on the end of our study. You heard some comments from across the table that we need more witnesses and we need more information, but unfortunately the time is ticking.

We have climate change on the agenda. Is procurement looking at the credits as well as the tax on carbon that's coming forward? The tax on pollution is one side of the equation, but there's an enormous economic opportunity for businesses with credits. Do you have to revamp your procurement around that?

Mr. Desmond Gray: I think the answer is that we're looking at that now in the broader sense of green and clean technology, and how procurement could be leveraged to support that initiative.

Over the many years, because I'm getting old now... I was around 20 years ago when there was a very strong push for green products. For example, 20 years ago, had you wanted to buy paper in the federal government that had recycled content, it didn't exist. Through constantly advising the private sector that this is where the government wanted to go—of course, over the years virtually all the paper we buy has a high recycled content, and it's very environmentally green—we've totally transformed the market. It

wasn't just us, but the world at large. You would have to pay a premium now to find paper without green content, so yes.

• (1650)

The Chair: Thank you.

We're going to move to Mr. Dreesen for five minutes.

Mr. Earl Dreesen: Thank you very much, Mr. Chair.

I'd just like to go back. Right now I'm not 100% sure just which one of the three organizations I should ask to get the information back, but I asked a question about the Defence Analytics Institute and also about the value proposition to Canada.

Perhaps you could go back to the statements and the questions that were asked there. I think it's important that we would have that specifically: reporting on the recent activities of DAI—including that report, as it's a key component on how the government catalogues manufacturing companies in Canada that are tied in with foreign investment—and on whether or not the value proposition guide is being used today and how you would assess its effectiveness versus the old offset model.

If we could get that information from whichever source is best suited, I would appreciate it. Thank you, Mr. Waring.

On the other part, I believe it was Mr. Gray who was talking about the Build in Canada innovation program and the significance that is involved there. I'd like to get a little information on that. I believe you talked about the procurements in which some comes from Canadian businesses and some from places outside of our country. When you're purchasing and bringing things in from other countries, are they subjected to things like GST? How are you going to deal with the competition issue when it comes to our having a carbon tax and the other countries not having it? Have you done any assessment on that, or will you be doing any assessment on how that will impact our industry?

Mr. Desmond Gray: Thank you for that.

I can certainly answer some of them; I may have to come back with a response on some of the others.

In terms of the Build In Canada innovation program, that was begun, as I mentioned, five years ago as a pilot.

Essentially, if you think about procurement traditionally, procurement says, "Tell me what you want. We'll write a statement of work and we'll go out and buy that thing that you know you want."

This was just the opposite. We did it on an annual basis; we had an annual call. We essentially said, if, as a Canadian business, you have an innovative idea, bring forward your innovation. We do it now for both military and non-military goods and services. You apply online; it's all electronic, with no paper, and now it's 24/7, you can apply any time. Innovation never sleeps, so you shouldn't have to wait a year on the cycle of procurement to bring your innovation in. We changed the program because innovators told us that's what we had to do, and they're absolutely right, so we've done it.

The other thing is that when they come in, they have highly specialized technical people. We work with IRAP, which is part of the NRC. They look at it and we challenge it to see if it is truly innovative. Software that goes from version 6.1 to 6.2 is not likely to be innovative. It has to be a really significant innovation.

Then, once we have reviewed it and we say it's innovative, we move you forward in the process. You've been identified as an innovation and accepted into the program. The next step is we have to work with that company or innovator to find a champion department. It's like a harmony program. We try to match a company, an individual, with a government department. We post it on our website, where it's all very public as to who's in. We work very strongly with the other government departments through the people in our office to find matches. Sometimes it's very obvious as to where it would go.

To give you a sense of the scale after five years, I can essentially give you the numbers for all the companies that have come in. Since we were launched, we've had 272 pre-qualified innovations come through. We've awarded 205 contracts worth \$72 million; 96% of these were SMEs. Many of them have never done business. They're smart in innovation. What they're not smart at is business, finance; they never did a business plan. For many of them, their first introduction to the business model is coming to our program. Our program is designed not to be critical, but to provide support, help clarify, give examples, and make it easy for them to get through, and to help them find a match.

Then when they get into the program itself and they're actually in the test, we buy that innovation. We buy it and we place it in that testing department. We establish a test plan with both the testing department and the innovator, and we also do the procurement, because we're actually buying that product for the department. They do the test plan. I can give you examples.

It was mentioned earlier that the impact of first sale to a Canadian government is huge. We've had companies that, even though they hadn't actually completed the test, have been literally able to get opportunities abroad because, in fact, the Government of Canada had already taken this product this far. I can give you examples of companies that have grown into a tremendous success story, and they've told us this. One of them I'll just raise for you. It's called Aeryon Scout, from Waterloo, Ontario.

• (1655)

The Chair: Actually, could I get you to send that to us, to submit it?

Mr. Desmond Gray: Yes, I will. I'll send you a lot of these. It's pertinent information.

The Chair: That would be great, because we're out of time. We're going to move on.

Mr. Earl Dreeshen: Perhaps you could also send the information on the carbon tax implications as well.

The Chair: Send it to our clerk, and we'll get it to the whole committee.

Thank you very much.

Mr. Sheehan, you have five minutes.

Mr. Terry Sheehan (Sault Ste. Marie, Lib.): Thank you very much.

Thanks to all the presenters.

My first question is for Mr. Halucha. Throughout the manufacturing study, we heard in particular steel witnesses talk about dumping, and you talked about trade.

What can Canada do to strengthen our response to unfair trade? In your opinion, what has happened, and what could be done?

Mr. Paul Halucha: That's a very good question, and I think it's a really important question. I had the opportunity to meet with representatives from Canada, the United States, and Mexico in Ottawa the week before last who were here to discuss exactly what we can do in a coordinated way, because it's obviously not just a Canadian problem. In fact, if the steel comes into Mexico and enters the North American market that way or through the United States, it's as big a problem as if it landed in Canada.

In the last two budgets, the governments identified that it will be making improvements to the rules around CITT. There have been challenges with the speed, and that's what I've heard. It's the speed of the response from the federal government once it has been identified, and also what the level of harm is. In both cases there have been changes made to the CITT to reduce the level of harm that actually triggers a response to keep the product off the Canadian market and the speed at which they can move.

I frankly think there's more to do in this space, and we've been active internationally as well in the OECD and in other forums to work with other countries that are suffering from the same kinds of issues to put pressure on those countries. The only real solution here is actually reducing the supply on the market, particularly from countries that can dump it onto the market, not have to worry about the profits, and not have to worry about making the money back because their objective is actually just to keep those plants operational. They never have to worry about what the bottom line is, and so that's the real focus.

I think it's going to be an ongoing challenge, and I believe the government will continue that focus throughout its mandate.

Mr. Terry Sheehan: Thank you very much.

My next question is for Mr. Gray. You mentioned the Build in Canada innovation program in your opening remarks. Of course, our government is very interested in the innovation agenda and helping small and medium-sized enterprises to succeed. How can we grow this program to help more SMEs grow and succeed, and what kind of outreach does your office do to inform SMEs about this program?

Mr. Desmond Gray: Thank you for the question.

To be honest, the program has grown slowly but surely since it was established in 2005. When we first began, we had a very moderate amount of money. It was \$15 million. Last year we had \$30 million. This coming year we'll have \$40 million. Of course, part of our review was to ask what the right amount of money is.

We're working with our colleagues in ISED. We're working with NRC and seeing what the opportunities in Canada are more broadly.

I guess my comment comes down to looking at the American model. The advantage of the American model is—and I'm just reading back into it 35 or 40 years ago—that when they looked at spending, they recognized the need to align R and D to economic output or commercialization. They're not afraid of failure. You cannot do innovation without having failure. The Americans have lots of it, but they also have huge successes.

For example, one of their programs that began in SBIR was a very small company called Qualcomm. They began with an SBIR grant, and today they have a capital value of \$140 billion in the marketplace, a global leader.

Out of these programs there are many that don't succeed, that don't get past phase one. Some go through phase two. The great opportunity in the American model is that once they get to phase two, that good or service can then be purchased without any further competitive process by U.S. government departments, which means it becomes hugely attractive both for the company or the department that sponsored them, but also it then allows them to leverage economically both in the United States and globally.

It attracts partners because they're at the point of commercialization. Angel investors come in and say, "Okay, the risk is down." We're looking at these kind of things to see how we can advance this in Canada.

• (1700)

Mr. Terry Sheehan: Can you provide some examples of some of the companies that have scaled up because of the BCIP?

Mr. Desmond Gray: Yes, I can.

The one I was just speaking about, Aeryon Scout, has told us that since participating in the BCIP, the company increased from about 25 to 75 employees. They also said they're testing with DND, the sponsoring department. It enabled their business to open new markets for their technology with recent sales to the United States military, South Korea, and several other countries.

Another one is ULG-100, by 2G Robotics, again from Waterloo, Ontario. Through the BCIP, they developed an underwater laser

scanner. It was successfully tested by Defence Research and Development Canada for them.

This is another example of being in the midst of something and somebody else says they think it's a great idea. In the midst of all of this—I don't know if you remember when the *Costa Concordia* sank—the Italian government asked for this innovative company to bring over this product, and it was used to help salvage the *Costa Concordia*.

The Chair: Thank you. I'm going to have to cut you off there.

Mr. Garrison, you have two minutes, please.

Mr. Randall Garrison: Thank you very much, Mr. Chair.

It's strange when we have only two minutes here.

I want to talk some more, and hopefully we have enough time—

The Chair: You have five minutes.

Mr. Randall Garrison: —for me to get five minutes again, probably.

I want to ask about one piece of the shipbuilding strategy, which is going to be out of context here.

When it was originally being done, there was talk of somehow allocating some work or some of the subcontracting so that smaller shipyards could participate so that we were not just developing two big shipyards, but we were also keeping that capacity.

I know the Victoria Shipyards in my riding have done a very good job of attracting cruise ship refit in the gaps between the military work they do.

What's happened with that discussion on the shipbuilding strategy about trying to make sure that shipyards like Point Hope, which is just outside my riding, or Nanaimo Shipyard, can participate in some way in the manufacturing?

Mr. Jeff Waring: I'll start.

The national shipbuilding strategy is a package that will work for large vessels, and that's been awarded to Irving as well as Vancouver Shipyards. All small ships will go to all other shipyards in Canada, meaning not to Irving or to Vancouver Shipyards.

In addition to that, competition for the long-term and service support contracts for the federal fleet will go out to Canadian companies, so those are other opportunities for all shipyards to potentially compete for future work.

Mr. Randall Garrison: Is there any barrier to some of the shipyards being subcontracted in the large packages?

Mr. Jeff Waring: Into the existing contracts...?

Mr. Randall Garrison: Yes, like the Seaspan contract. Is there a restriction on them if they choose to subcontract some of that work? In my riding, if Victoria Shipyards or Point Hope has technology to install in a ship and can do that, is that completely Seaspan's decision?

Mr. Desmond Gray: We think the answer is that you're correct and there is no restriction, but I'd like to double-check and I'd like to bring a clear answer back to this committee.

Mr. Randall Garrison: That's great. Thank you.

The Chair: We would very much appreciate that.

We have enough time for five minutes for two people.

Mr. Garrison, you have five minutes, and you guys will have five minutes.

We're going to move to Mr. Baylis for five minutes.

Mr. Frank Baylis: Mr. Chair, I'll split my time with Mr. Longfield.

I have three or four questions, moving completely to another area: international treaties for intellectual property.

Mr. Halucha, this is an area that could have tremendous impact on the productivity of our companies. I'm speaking specifically about the Madrid agreement with respect to trademarks in the PLT, the patent law treaty agreement.

I believe 98 countries are signatories to the Madrid agreement. Why is Canada not a signatory yet, and what can we do to expedite that?

Mr. Paul Halucha: We haven't signed the treaties because we're not in a position to implement them at this point. This principally comes down to the IT changes that need to happen at our intellectual property office to allow them to connect into this global network.

• (1705)

Mr. Frank Baylis: What are the changes that need to happen there?

Mr. Paul Halucha: They're pretty extensive. CIPO operates principally in a digital space, but there is still a fair amount of paper movement of files in their organization. If you talk to intellectual property lawyers, they can tell you in more detail than I can about some of the challenges of dealing with some of CIPO's infrastructure.

Mr. Frank Baylis: We're behind the times—

Mr. Paul Halucha: They're behind in these treaties.

Mr. Frank Baylis: —and because we're behind the times, we can't sign these treaties, and then Canadian companies....

We're studying productivity. It's our government's job to not block our companies from being productive. What should we be doing to address this problem at CIPO?

Mr. Paul Halucha: The implementing legislation passed through the House of Commons. It went through in 2013, I believe. We actually passed all the legislation to sign on to all of the WIPO treaties, other than the Marrakech Treaty, which we completed this spring. It was approved by both the House of Commons and the Senate.

The advantages of having those WIPO treaties operational are absolutely critical to the Canadian economy. Madrid and Singapore allow for Canadian firms to easily protect their IP in other marketplaces. As you know, we want to get Canadian firms into those marketplaces. Protecting your IP easily in Canada, with a lawyer, is critical.

Mr. Frank Baylis: What do we need to do to get on with the other 98 countries, for example?

Mr. Paul Halucha: The challenge is with CIPO. They need to get the IT frameworks in place to enable them to do it.

I believe there are a couple of other challenges they have to deal with. There were some changes to the fee structure, which I believe they're moving forward with now. This will enable them to charge certain fees to disincentivize some types of behaviour, as other countries have done as well. Then they will be prepared to have those treaties come into force.

I agree with you. It's high time for that to get done. It's on the top of the agenda for the current commissioner at CIPO. It's their top priority.

Mr. Lloyd Longfield: I'd like to ask some questions around rural Canada. Guelph is close to rural. We're outside the GTA, outside major centres, but we have military contracts in Guelph. Some of those companies have said that contracts have dried up over the last few years and that purchasing volumes are half what they used to be, in some cases.

Do we have an idea of money that is going through the department or money that's been allocated but isn't spent? Is there a pent-up demand that they might see sooner than later?

Mr. Paul Halucha: You're thinking of contracts from the Department of National Defence specifically?

Mr. Lloyd Longfield: Yes.

Mr. Paul Halucha: These are firms that would benefit directly from those contracts versus from ITB policy then.

Mr. Lloyd Longfield: Exactly. It would be people doing ergonomics, people doing steel for General Dynamics, as an example.

Mr. Paul Halucha: The department, along with PSPC and our department, put out a large design contract today on combat ships, the warship design, which I know is going to be one of the largest procurements in Canada's history. The government is going to make a decision around the purchase of jets, which will also result in significant direct and indirect work in Canada. There are a number of procurements that are coming, and Jeff can talk about the number that are active in Canada.

I can't speak to the specifics of your individual firms, but I can tell you there's a significant amount of procurement that's taking place or will take place that will have benefits directly for Canadian companies.

In terms of the industrial technology benefits, for every dollar of the value of those contracts, the primes are required by the contracts to invest a dollar in Canada, so it's 1:1. We'll see a significant amount of benefits for Canadian firms as a result of that.

Mr. Lloyd Longfield: That helps our study. Thank you.

Mr. Paul Halucha: We do a huge amount of outreach, too, in that area.

The Chair: Thank you.

We're going to move to Mr. Hoback. You have five minutes.

Mr. Randy Hoback (Prince Albert, CPC): Thank you. I appreciate the committee's indulging me. I sit on the trade committee, so I find a lot of this really interesting.

We see a proposed carbon tax or a charge on carbon coming into Canada in the next couple of years. I'm curious how you're going to consider that in your tendering and in your purchases. When you're looking at goods, and you have a Canadian company that's going to pay that carbon tax or that price on carbon, and you're looking at competing countries that may not have a price on carbon or a carbon tax, how will that be taken into consideration or will it be taken into consideration? I'm looking for some comments on that.

The second question I have is related to purchasing. I always find it interesting. There was an article I read a couple of years ago. A former adviser to Prime Minister Harper had this beef about how our military can't buy something off the shelf. If it's good enough for the Americans, why can't it be good enough for the Canadians? If it's good enough for the British, why can't it be good enough for Canadians? Why do we need to spend all this time and effort redesigning stuff that's already being used out there in the world today?

I'll start off with the carbon tax, and then I'll let you finish with the second question on why we feel we need to redesign everything before we buy it. This is wide open.

•(1710)

Mr. Desmond Gray: The answer is, clearly, we'll have to look at that.

One of the obvious ways it could be brought into the procurement process is through a specification that clearly identifies one of the characteristics of the goods or services that you want to buy. If you want to buy something more environmentally sustainable, it has to have certain characteristics. It may be that it will require a certain kind of certification to make sure it meets those requirements. These are all things we have done in the past, so there's definitely a mechanism there.

I would say, just to remind you, that one of the things—and it's a good thing, but it's an important thing to remember—is that PSPC responds. We provide the response to the request from other government departments about what they need. They're our client, and the more we can understand well in advance what our clients are asking for, the better we can really work with them to make sure we can find good solutions for them.

I would honestly say, based over many years, the more we can give a heads-up to industry, and especially Canadian industry, that this is where we're going to go, the better. You can tell them that if they are going to spend their money down the road in certain areas because they're looking for a change in behaviour or a change in product, let people know, or else what you do is penalize the market. For example, the first company might go from X to Y, and it may be

very good, but it may not provide for a competitive situation in Canada. How do we make sure that we provide some insight? Advance notification would be very helpful.

Mr. Randy Hoback: Then in that scenario you're obviously going to have more costs on your end to go through that evaluation process and to set up a system to take those types of things into consideration. Generally, the cost has to go up. Is that fair to say?

Mr. Desmond Gray: I wouldn't actually agree with that. I think there are two sides to it. I think part of our challenge is to make sure the process doesn't increase the cost in terms of an evaluation process. The real question would be, does that change in characteristic require an increase in price?

Mr. Randy Hoback: Is that being realistic?

Mr. Desmond Gray: I've changed processes without increasing the cost and the overhead involved in evaluating a new system that has new requirements based on it. It's a generalization, I think it's fair to say, and this is a challenge, to be honest with you. I think we can do that, but I think we have to be adaptive in terms of how we evaluate it.

Mr. Randy Hoback: Then you're telling me you've got room in your existing budgets and the existing way you're doing things to find even more savings?

Mr. Desmond Gray: Oh, I couldn't commit to that, sir.

Mr. Randy Hoback: Okay.

Mr. Desmond Gray: We're not far enough down the road to know that. We know we need more investment in terms of the analytics. You're absolutely correct there. We need more investment in reaching out to industry and reaching out to small businesses and better communication. I think a comment was made about rural, and we need better engagement with the rural areas.

We tend to locate in the larger urban centres, and I know innovation hubs are there and industry is there. In a digital world, innovation is everywhere, and Canada is a huge country. This is part of why we're looking at how we deliver our program and how we have to expand and change that to make it more available.

Mr. Randy Hoback: Okay.

Coming back to military procurement, is there a simple answer to why we need to reinvent the wheel on everything we purchase? When the military is looking for a warship right now that they're tendering, weren't there some warships available out of France? I'm not a defence specialist, so I'm speaking in generalities for sure, but why could we not have just bought those? Why did we insist on reinventing the wheel? Could we not have saved millions and millions of dollars for taxpayers in that scenario?

Mr. Paul Halucha: In terms of that question, it was a policy decision to rebuild shipbuilding capability on both coasts of Canada, so that explains that single incident.

Mr. Randy Hoback: Yes, that's fair.

Mr. Paul Halucha: I think in general the statement of requirements that's developed by the military is typically what underpins the construction of the market. The companies either can or can't participate. It's rare that it drives you to just one selection, and ideally, from the perspective of the work that Jeff and I and ISED do around maximizing industrial benefits, competition is typically very helpful in enabling us to get the best in terms of the value proposition, and it encourages firms to bring forward the strongest commitments to Canada.

The Chair: Thank you very much.

Mr. Garrison, you have five minutes.

• (1715)

Mr. Randall Garrison: Thanks very much.

Mr. Hoback's question, of course, leads me to the submarines. People say you get a good bargain by purchasing something that exists. We bought the submarines, and they were off the shelf, and they had been off the shelf for quite a while. That being said, it created a lot of manufacturing work in my riding.

Mr. Randy Hoback: A lot of service work....

Mr. Randall Garrison: It was a lot of rebuilding, really, from the ground up.

I'm trying to stay within the confines of the study you're doing, but I have shipbuilding procurement people in front of me and I have to raise some concerns.

The shipbuilding strategy started off as a floor in terms of what our needs were, and now it has suddenly become a ceiling. Nobody can imagine we would get more than the number of ships that were the absolute minimum that were in the strategy. It's become about the dollars instead of about the ships. That floor was what we absolutely needed, and suddenly the shipbuilding strategy is the money and how many ships we can get for that, so we've had a kind of slippage there in our understanding of that strategy.

The timelines were originally set out to try to maintain our capacities, and now that's slipped to—I'll be as charitable as I can—filling immediate gaps. We saw that with the tender ships, where we're now having one refit, and we're contracting with the Spanish armada and doing all kinds of stopgap things that end up costing us quite a lot of money outside the money that was allocated.

All of those really don't fit so well into this study, but I think one does. One of the purposes for shipbuilding was to create stability and predictability in the shipyards around the country so we would have that viable industry that would support our military, but also support good jobs in Canada. I have to say the problem we're having now with the strategy is that predictability for a lot of the potential employment is lost.

When the frigate refit was finished in my riding, 250 people were laid off. The idea was we would be at a certain place in the shipbuilding strategy and we wouldn't lose.... It's not just the worry

or concern about families, which I do have, but it's also the capacity you lose. You have skilled teams built up to do that work, and if you don't have that stability and predictability in the industry, they will disperse. Then you have people scrambling trying to restore that capability.

I guess I was really asking for a procurement view, but anybody who wants can respond to that. How are we doing on that goal of the shipbuilding strategy of creating that stable and secure industry that doesn't go through boom and bust?

Mr. Desmond Gray: Your point is very well taken. Unfortunately, I'm not the marine expert. I didn't realize that would be a focus of this committee, but we would be happy to note it and to respond to it. You're absolutely right.

As we mentioned earlier, predictability allows for better definition. Better definition leads to alignment with industry, capacity, cost, and of course in terms of the capacity to ensure people have jobs and they will be there. If you lose that capacity and you have to wait a year, you face the odds they will have to go someplace else. Then you have a whole other cost to bring your workforce back up.

Yes, you're absolutely correct. That's the challenge.

I'll defer to my colleague. Would you like to say anything?

Mr. Sylvain Cyr: I can add maybe one thing. I think there is still a conscious effort by government, in trying to align the various ships and work packages, to try to avoid this as much as possible, but I think that at times, despite some of those best efforts.... If one thing gets delayed, and through the tendering process more time is needed, we then, unfortunately, end up with the situation you describe.

I know there is still an effort. I'm not the marine expert either, but in speaking regularly with my colleagues, I do know they are trying to avoid that as much as possible.

Mr. Randall Garrison: Is there anybody else?

Mr. Jeff Waring: Briefly, again, part of our effort is to generate economic benefits within the marine sector as well as in the broader economy so we are applying our industrial offset policies to the national shipbuilding strategy procurements.

In addition to that, both of the prime contractors, Irving and Vancouver Shipyards, are required to invest a certain proportion of their contract value through what they call a value proposition. These are investments in human resources development, technology development, and industrial development in the marine sector itself in order to build that sustainable marine sector.

Yes, the sequencing of ships and shipbuilders is part of it, but it's also the leveraging opportunities we work with the shipyards on.

The Chair: You have five seconds.

Mr. Randall Garrison: I'll just say the word "apprenticeships". I would like to see in procurement some attention to building future capacity through apprenticeships.

• (1720)

The Chair: There we go. You got it in.

The final five minutes go to Mr. Arya, I believe.

Mr. Chandra Arya: Thank you, Mr. Chair.

Mr. Garrison, talking of ships and submarines, I toured the shipbuilding facilities in Halifax and I spent all night in our submarine, the HMCS *Windsor*, so I'm now an honorary submariner. Anyway, we will not go there.

Mr. Gray, you talked about BCIP. We have a lot of supply side programs in the government, but very little on the demand side. I'm glad that you're looking at SBIR, which has been quite successful in the U.S. We hopefully will get a program like that, but instead of adding one more program, I think the small industries minister mentioned, if I'm not wrong, there are 300 programs in our government today.

How can we rationalize that number of programs and get some good programs, something like SBIR?

I think that has more to do with Mr. Halucha's portfolio. We have so many programs here. How can we rationalize that and bring forward something like what Mr. Gray is talking about, the SBIR program in the U.S.?

Mr. Paul Halucha: There are two answers to the question. SBIR is clearly something that we are looking at and have been working at ourselves in depth with the United States to understand how it would work and how it could be adapted to Canada—

Mr. Chandra Arya: I understand that, but is it not time to rationalize the number of programs we have?

Mr. Paul Halucha: This is the retooling of government. Our minister has been discussing the innovation agenda and some of the measures he's doing, but at this point nothing has been done.

Mr. Chandra Arya: Going back to my colleague's question about a partnership with the provincial government, one of our previous witnesses was the Chemistry Industry Association, which said you don't have to reinvent the wheel. Already provincial governments have brought in some programs. He specifically mentioned Ontario and Alberta. Alberta has a chemistry industry-specific strategy. They have allocated \$400 million.

I think the point my colleague was trying to make is that instead of coming out with a separate one ourselves that does not gel well with what the provincial governments are doing....

I have a few seconds. Maybe I'll share my time with my colleague here.

Mr. Majid Jowhari (Richmond Hill, Lib.): Thank you, and thank you, witnesses, for coming.

At the beginning of your presentation, you talked about small businesses and the valley of death, the challenges that small businesses go through. I'm spearheading a study trying to identify

different programs that are available to small businesses during the various stages of their development. One of the areas with the least number of programs or partnerships available is the valley of death during the growth phase.

What is your department doing, whether as a partnership with an organization such as BDC or independently, to help businesses get through that phase? That's where we lost a lot of businesses and that's where a lot of jobs could be generated.

Mr. Paul Halucha: I'll let Gerard have an opportunity to speak shortly, since he hasn't spoken yet during the meeting.

I think BDC is a key part of this, and this allows me an opportunity just to get back to our conversation at the beginning. The BDC has spent about \$4.7 billion on manufacturing in 2016, according to their numbers that they've provided.

Mr. Majid Jowhari: That's why I specifically thought about BDC, but what is it specifically that your department is doing?

Mr. Paul Halucha: The programs that we have are focused on a number of sectors.

We have an automotive innovation fund—

Mr. Majid Jowhari: Equivalent to other innovation funds for small businesses—

Mr. Paul Halucha: That's right. It works in Ontario effectively, but not only Ontario.

We have another program that deals with aerospace companies, the SADI program. We also have a broad portfolio, as I mentioned earlier. The regional development agencies, which have significant programming to support SMEs, are also part of the portfolio. They have about \$1 billion in annual spending that they provide across the country.

In addition, we have the National Research Council, which, as you know, has centres across the country and runs a program called IRAP, which provides support, again, to small and medium-sized companies and supports mentorship programs.

Mr. Majid Jowhari: Are they really focused on helping companies during that—

Mr. Paul Halucha: The problem is that—

Mr. Majid Jowhari: —phase? That's the challenge.

Mr. Paul Halucha: The answer to that question—

Mr. Majid Jowhari: When I map it, they don't line up there. They line up at different stages. That's why we see, either when they weaken in growth or when they're dipping, that unfortunately none of those incentive programs are available during that dip.

• (1725)

Mr. Paul Halucha: I don't disagree, and that has been a policy challenge that has been identified. I can tell you that in that valley of death you also have many firms that.... They call it "valley of death" for two reasons: one is because they can't get money, and the second is that many firms never make it out of that valley.

Mr. Majid Jowhari: When they get sold, maybe—

Mr. Paul Halucha: I don't have a week that goes by when we don't have at least one or two companies that come in and say that they're in that valley of death—that they've benefited from IRAP, they've had some BDC funding, they maybe had mentorship from other parts of the public service, and now they're at a position where they need significant resources. I don't dispute that we don't have an easy answer for them. In certain sectors we do, but in other ones that we don't—

Mr. Majid Jowhari: What can we do to support them?

Mr. Paul Halucha: It comes down to risk tolerance.

The Chair: Thank you.

Thank you very much to our witnesses for coming in today. It was very informative.

Thank you, everybody.

Just before I suspend, I want to remind everybody that on Monday it's full committee business. We'll be discussing our future business and what we're going to be doing.

The meeting is adjourned.

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