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Chair

Mr. James Rajotte

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• (1105)

[English]

The Chair (Mr. James Rajotte (Edmonton—Leduc, CPC)): I will call to order the 38th meeting of the Standing Committee on Industry, Science and Technology. Pursuant to Standing Order 108 (2), we are continuing our study of Canadian science and technology policy.

We're supposed to have four organizations with us here today. We have three with us, and I believe the fourth is on the way.

We have, from the Networks of Centres of Excellence, Mr. Jean-Claude Gavrel, who is the associate vice-president; from Precarn Incorporated, Mr. Paul Johnston, who is the president and CEO; and from the University of Waterloo, Mr. Tom Corr, the associate vice-president for commercialization. We are expecting to have the Ottawa Centre for Research and Innovation, which I will introduce if they are able to arrive in time.

Witnesses, we have up to five minutes for an opening statement from each one of you, and then we will go to questions from members.

We'll go in the order of introduction. Mr. Gavrel, we'll start with you.

Mr. Jean-Claude Gavrel (Associate Vice-President, Networks of Centres of Excellence): Thank you very much, Mr. Chairman, for the opportunity to speak to you today about the networks of centres of excellence, and specifically about the centres of excellence for commercialization and research and their role in the government's science and technology strategy.

We have provided, I believe, copies of the brief, as well as copies of additional material, so I will probably skip a few parts of my written remarks in order to stay on track and on time.

[Translation]

I will begin my presentation with a brief overview of the mandate and history of the Networks of Centres of Excellence, or NCEs. I will then describe in greater detail the Centres of Excellence for Commercialization and Research (CECR) program, including its mandate and selection criteria. I will end by giving a few examples of specific commercialization activities and projects that will be undertaken by the 11 new Centres over the next few years.

[English]

The networks of centres of excellence program was launched in 1989 to mobilize research excellence for the benefit of all Canadians by bringing together partners from the academic, private, public, and

not-for-profit sectors. We are a partnership between Industry Canada and the three federal granting agencies: the Natural Sciences and Engineering Research Council, the Social Sciences and Humanities Research Council, and the Canadian Institutes of Health Research.

The program currently funds 16 networks across the country. They operate in the areas of health, advanced technologies, the environment and natural resources, and engineering and manufacturing. The committee members have been provided with the list and a description of the current networks.

From the start, these networks have proven that they can take bright ideas and turn them into tangible benefits for Canadians. In terms of numbers, over 2,000 organizations, Canadian and international, are participating in the program, and 800 of those come from the private sector.

[Translation]

Over a typical seven-year cycle, the NCEs secure nearly \$500 million in cash and in-kind contributions from their partners. In 2006-2007, the Networks filed 100 patents and 20 licences.

[English]

And they have launched over 80 spin-off companies since 1997.

In budget 2007 the government announced nearly \$350 million of additional funding to expand the NCE mandate. With this additional funding, the program now includes three major new programs: the centres of excellence for commercialization and research, which we call it the CECR; the business-led networks of centres of excellence, NCEs; and a national industrial R and D internship program. I will focus the rest of my remarks on the CECRs.

[Translation]

The CECR program's goal is to create world-class centres to advance research and facilitate commercialization of technologies, products and services. These centres operate in the priority areas mentioned in the S&T Strategy: health, information and communications technology, environment, and energy and natural resources. The program funds the Centres' operating and commercialization costs. Research and infrastructure costs must be covered by other federal programs, or through initiatives such as those run by the granting agencies and by the Canada Foundation for Innovation.

The first CECR competition was worth \$165 million and was launched on June 26, 2007. The response from the community was exceptional: 110 eligible letters of intent were received during the first phase of the competition and 25 groups were invited to submit full proposals.

[English]

Proposals were evaluated on the potential benefits to Canada, the strength of their business plan, and the team track record. In addition, close attention was paid to two criteria related to commercialization: the ability to create, grow, and retain Canadian companies that can capture new markets with breakthrough innovations; and evidence that the proposed centre would accelerate the commercialization of leading edge technologies, goods, and services in the areas of priorities.

A private sector advisory board assessed the economic and commercial benefits and opportunities of each proposal and provided recommendations to the NCE steering committee.

The NCE steering committee is composed of the presidents of the granting agencies, the deputy minister of Industry Canada, and, as an observer, the president of the Canada Foundation for Innovation.

On February 14, eleven new CECRs were announced, and we have provided a full list of these. These eleven centres join the seven that had been previously announced by the government in budget 2007, which are located in Halifax, Vancouver, Montreal, Quebec City, Toronto, and Calgary.

Included in the brief I have indicated a number of examples of some of the breakthrough technologies and some of the commercialization expectations that these centres have put forward. In the interest of time, I will not read this part of the document.

I will conclude my remarks here, thanking again the committee for inviting us to answer your questions on this and any other programs we are currently managing.

Merci, monsieur le président.

The Chair: Thank you very much, Monsieur Gavrel.

We'll go now to Mr. Johnston, please.

Mr. Paul Johnston (President and Chief Executive Officer, Precarn Incorporated): Thank you, Mr. Chairman and members of the committee, for the invitation.

The paper we submitted was subtitled "Commercialization of the Results for the Benefit of Canada". In other words, rather than taking on science and technology broadly written, we wanted to talk about the commercialization process. I'll concentrate my remarks on the commercialization aspects today.

Precarn Incorporated is a not-for-profit national company that supports collaborative research and development in advanced technologies. The unique aspect of our model is that we insist that every one of our research projects include the end user; that is, the organization, company, hospital that has a need that can be filled with a technological solution.

Another name we use for that end user is first customer; therefore, we are very proud of the fact that our whole research and development philosophy builds commercialization right into the process of the research and technology development.

The basic premise of the issue facing Canada is well understood, and it's been discussed for a number of years. We are among the world leaders in supporting publicly-funded research at our

universities and research hospitals and so on, but at the same time we lag—behind other OECD countries, principally—in the commercialization of the products that result from that research. Another way it's expressed often is that our industrial sectors do not contribute as much to research and development in this country.

My submission is that one of the reasons for this is that we as a country do not give enough support nor provide enough incentive to what I'm referring to as the middle. In the paper, I refer to the fact that there is the "stuff" we're talking about, and that has three different aspects; the stuff is science, technology, and product. Those are the three results, if you will, the three creatures we're trying to achieve.

Underneath that, there are three processes, and the processes are research, which often or most commonly relates to science; development, which relates to technology; and commercialization, which relates to a product.

Underneath that, broadly speaking, and I'm obviously oversimplifying, there are organizations or processes that facilitate those things. Universities and research hospitals do research that creates scientific knowledge. At the other end, private companies—commercial enterprises—do commercialization that sells products around the world.

In the middle there are organizations like Precarn that support the technological development that bridges the gap between scientific research and the commercialization of products.

The government has taken a number of steps to promote the bridging of that gap and to promote the application of science and technology. The science and technology strategy, entitled "Mobilizing Science and Technology to Canada's Advantage", included programs such as the CECR program that Jean-Claude just referred to, the business-led networks of centres of excellence, which are attempts to recognize that the issue is that we do really well at science and scientific research but are not so good as a country at commercialization of products.

The paper itself recognizes that gap. It talks about there being a place in the middle of the continuum where there are both public good benefits and private benefits to be achieved. The paper says that at that point in the spectrum, government and private sector should collaborate, as long as the private sector is willing to put in money to try to bridge the gap. That's the issue.

For example, the United States has a small business innovation research program that is a competitive process, much like the process we operate. It's money taken out of R and D departments in the United States government—eleven of them, I believe—and it's supposed to be designed specifically to promote technological innovation in small companies. In their own description of the program, they say SBIR funds the critical start-up and development stages, and it encourages the commercialization of technology products or services, which in turn stimulates the economy.

But they make a specific point in that document to say that they do not fund the commercialization activity; that is for the private sector. What they're funding is the space in the middle between the scientific breakthrough and the technology development.

As I say, government has made progress in all of these areas. We would submit that there is still room in the middle for the government to support, on a competitive basis, technology development.

• (1110)

Thank you.

The Chair: Thank you very much, Mr. Johnston.

We'll go to Mr. Corr, please.

Mr. Tom Corr (Associate Vice-President, Commercialization, University of Waterloo): Good morning.

It's great to be in Ottawa today representing the University of Waterloo and the Waterloo Accelerator Centre.

As the funding and facilitation of science and technology is in part the subject of today's meeting, I'd like to give you a snapshot overview of the success and challenges of our commercialization efforts in the Region of Waterloo and in Canada's technology triangle, which makes up the cities of Kitchener-Waterloo, Cambridge, and Guelph, Ontario. My perspective comes from the other Silicon Valley North.

Waterloo is considered to be one of North America's leading concentrations of technology players, commercialization expertise, technology transfer, venture and early-stage capital, and of course innovation. If you broaden the Waterloo region definition to include the city of Guelph, we are referred to as Canada's technology triangle, or CTT, and we're recently described in the British journal *Regional Studies* as one of the most dynamic sources of high-technology activity in North America.

Waterloo's information, communication, and technology sector is going from strength from strength. In 2004 we were home to 327 high-tech companies, and by 2008 we have grown to 514. The ICT sector alone employs 13,000 people, or 10% of the region's workforce, and generates \$13 billion in revenue annually.

Notably, 250 of these companies are University of Waterloo spinoffs. Our region boasts more than 150 research institutions, including the Perimeter Institute for Theoretical Physics and the Institute for Quantum Computing. As of 2006, these institutes accounted for \$344 million in private sector research and development. Also, at a time when venture capital is difficult to raise, in 2007 we saw over \$300 million invested in local startups.

I am bombarding you with these facts and figures today because we like to think that the University of Waterloo has played a role in the success of Canada's technology triangle and Waterloo region's technology cluster, and we think the intellectual property ownership policy at the University of Waterloo has had something to do with it.

Basically, what we tell our faculty and students is that we don't own their brains, and if they develop intellectual property, they own it. It's a pretty simple policy: if you create it, it's yours. Inventors own their inventions and are free to commercialize and profit from them. We believe that inventor-ownership attracts the kinds of entrepreneurial researchers who have made Waterloo region and the University of Waterloo successful.

I come before you today armed with a few examples.

Since the sale of Cognos Inc. to IBM last year, Open Text Corp., a University of Waterloo spinoff, is now Canada's largest independent software company, with more than 3,000 employees worldwide. Research In Motion, the BlackBerry company, has over 5,000 employees within a few blocks of the University of Waterloo. They are great examples of what successful commercialization can do for a community.

Other successful spinoffs such as DALSA, Descartes, Virtek, and Northern Digital employ more than 1,600 people in Waterloo, and our region is hungry for more. At any given time we are looking for about 2,000 highly skilled workers, and at this point RIM alone are looking for 500 employees in Waterloo.

The University of Waterloo is also actively involved in incubating entrepreneurial startups, with our Accelerator Centre located in the university's research and technology park. By this September, we will have 35 companies in the Accelerator Centre, which speaks well to the entrepreneurial activity in Waterloo.

Our system of cooperative education has produced students who are finely tuned to the needs of our high-tech enterprises in Waterloo, and their efforts have attracted the attention of heavyweights, such as Sybase and Google, who have gone on to establish large offices in the research and technology park.

The University of Waterloo is known as the national leader in technology transfer from the classroom to the marketplace. We believe our creator-owned intellectual property policy, along with fostering an environment where collaboration is encouraged, has resulted in our success as a university and as a community.

Waterloo has shown that if you can create an environment where venture capitalists are comfortable with injecting funding into an entrepreneurial project, you can open the floodgates to economic activity, job creation, and innovation. The university is a big part of this environment, but so is the government at all levels.

At Waterloo, we believe that an environment that actively promotes and fosters research and its commercialization, coupled with an environment that facilitates commercialization through organizations such as the Accelerator Centre, provides tangible results in terms of commercialization of research and the resulting economic activity of our spinoff companies, which create jobs in order to commercialize the research.

What we need from the various levels of government in order to maintain these levels of research commercialization and the resulting economic development that has been seen in Waterloo can be summarized as follows:

Number one is policies at the federal level that provide for protection of the intellectual property that is developed by our researchers, so that we can attract investment capital.

• (1115)

Number two is continued funding at the federal and provincial levels for university research.

Number three is federal and provincial programs and tax incentives that provide incentives for investors to invest in high-risk, early-stage university spinoff companies.

Thank you for your time today. I look forward to your questions.

• (1120)

The Chair: Thank you, Mr. Corr, for your presentation.

We have two witnesses who have joined us during the other presentations. From the Ottawa Centre for Research and Innovation, we have the president and CEO, Mr. Jeffrey Dale, and the vice-president of investment and commercialization, Michelle Scarborough. Welcome.

Mr. Dale, will you be presenting on behalf of the organization?

Mr. Jeffrey Dale (President and Chief Executive Officer, Ottawa Centre for Research and Innovation): Yes, I will.

The Chair: Okay. You have up to five minutes for an opening presentation.

Mr. Jeffrey Dale: Thank you.

I apologize for being late. We went to the wrong building.

A voice: We all do that.

Mr. Jeffrey Dale: Good morning, and thank you for the opportunity to present to you today on the topic of commercialization.

OCRI, or the Ottawa Centre for Research and Innovation, was established 25 years ago as a facilitator of commercialization between our federal labs, our universities, and the emerging technology industry. We have grown since then. Right now, OCRI itself has more than 700 members, and we represent about 120,000 people, because we combine the business, education, and research sectors. We are continuing in that tradition of being the link between the education, research, and industry sector. In our region right now, we have 1,819 technology companies employing about 82,000 people.

Today, though, I would like to highlight a number of challenges with the Canadian commercialization process.

Canada has always been good at priming the pump and investing in discovery research at our federal labs, in our universities and hospitals, and through our national granting councils. We need to continue to invest in research, which fundamentally is an investment in people and in training. Ultimately, it is people who commercialize ideas.

The three main challenges I'd like to speak to you about are the need for clearer rules on intellectual property generated through publicly sponsored research; the development of a Canada-first procurement policy to support Canadian innovation by the government; and the crisis in the state of venture capital in Canada today.

On the first point, once research shows a promise, it has many paths by which to be transferred to a commercial company. This is one of the main challenges for companies looking to use intellectual property sourced through a research project. Currently there are no standard rules for transferring IP.

You've heard Tom talk about the University of Waterloo. There are probably as many universities as there are custom models that exist out there.

Our universities have their own rules. Our hospitals have their own rules. Our labs also have different rules. This is confusing for companies and poses a critical barrier for many of our small and medium-sized enterprises, as they look to find new intellectual property from our research-intensive institutions.

The government has an opportunity to demonstrate leadership by establishing clear rules around intellectual property generated by government-sponsored research. The Bayh-Dole Act of 1980 in the U.S. provided a very consistent approach to commercializing IP, and of course it gave preferential treatment to companies that were going to commercialize that IP in the United States.

My second point is about what happens when you finally do commercialize your first product and you're looking for that all-important first customer. We invest billions in research and millions more in supporting the transfer of technology and the development of start-up companies. These start-up companies develop products and services, but when it comes time to sell them, they cannot look to the government to be their first customer. We have a procurement system that does not quite support Canada-first right now.

We understand the challenges with our trade agreements and the need for a fully open procurement process. But we are letting our start-up companies struggle without referenced customers, while many of our trade allies are supporting their innovation-based SMEs through strategic procurement processes that allow them to gain a first customer to prove out the technology and to provide that all-important first reference as they go global.

Companies, especially start-ups, will gravitate to economies that show them some success in their first references. Many of our start-up companies are looking to other countries to find that reference customer today. If successful, we will see job transfers to those regions. After the billions we've invested in research, we are seeing our investments leave this country far too often.

We need to support Canadian-made innovation and establish a procurement process that would allow the Canadian government to buy new technology, assist our companies in commercializing our ideas, and start research projects that have global product potential.

ITAC, or the Information Technology Association of Canada, had proposed a strategic procurement program for the federal government a couple of years ago that would allow for Canadian innovation to have access to government business. We think now is the time to revisit that program to make sure we are supporting our own innovation.

My third topic is the crisis of the venture capital industry. In the last two years alone, Canada has seen a very alarming shift in our venture capital markets. We are taking less money every year into our investment funds overall, and we are now spending more, every year, than we bring in. And you don't have to be an economist to see that this is not sustainable.

There are several reasons venture capital is in trouble in Canada. Yes, we made bad investments in the late 1990s and early 2000s, and our funds lost a lot of money. We also lacked the experience to manage the growth and development of our companies from start-ups to strong, established companies.

We are a very young country with a very short history when it comes to high-risk venture capital. We fail in our first attempts. In fact, one of the measures of successful venture-backed companies is being able to grow from zero to \$100 billion per year in revenue. It's a measure that many VCs state. In Canada, we have seen less than a half dozen companies make that milestone in the past ten years; in Ottawa, we have not seen any.

• (1125)

I will skip ahead to comment on two things. One is to congratulate the government on implementing removal of some barriers that existed with foreign capital, like cross-border mergers and acquisitions, the U.S. tax treaty, and more recently the removal of restrictions on the 116 certificates. All these measures are announced, and we want to make sure you proceed with the implementation.

I'll skip ahead, because I know I'm running out of time.

The government can look at removing other tax barriers that prevent the flow of venture capital into our country, and it can also play a critical role in reviving the Canadian domestic venture capital ecosystem.

At the seed and early-stage financing rounds, both the federal and provincial governments could provide incentive tax credits, flow-through tax deductions, and/or reduce capital gains taxes for investors.

At the first round of institutional venture capital funding, the federal and provincial governments could also improve retail venture capital programs, particularly for provinces where there are none, like Ontario and Alberta. At a later round of institutional venture capital funding, the government can play a pivotal role as a source of venture capital—directly.

I will leave that there, sir, so we can start the questions.

The Chair: Thank you, Mr. Dale.

We'll go to questions from members.

Members, I'll remind you that we do have two motions today, one from Ms. Nash and one from Madame Brunelle. I have to have some time at the end of the meeting for motions, meaning our time for questioning is limited. I'm going to ask you all to be as brief as possible.

We'll start with Mr. McTeague, for six minutes.

Hon. Dan McTeague (Pickering—Scarborough East, Lib.): Thank you, Chair.

Mr. Corr, Mr. Dale, all the witnesses, thank you for being here today.

I was intrigued by your comments with respect to protection of intellectual property. This is something the committee has come to a decision on, on two occasions, and it will hopefully be the subject of further legislation in the not too distant future.

Perhaps I will begin with Mr. Corr. Could you give us an explanation of why you felt that was the first area of priority and recommendation for this committee?

Mr. Tom Corr: Sure. We've been successful in the Waterloo region in raising capital for start-up companies, in particular our university spinoffs. In fact the 15 companies we currently have in our Accelerator Centre have all managed to raise venture capital over the last 12 months.

But when you talk to the venture capitalists and the sophisticated angel investors, their number one concern is the ownership and protection of the intellectual property. If it's not clear to them who owns the IP, and if it has been protected through copyrights—or mostly through patents in our case, because we're dealing with technology, as opposed to a script—they simply won't invest. They will not make that first step to investing in something they know can be replicated elsewhere.

Without strong IP protection and the strong patent legislation that speaks to that, the chances of our raising capital for most of these companies would not have happened. Again, when the venture capitalists were surveyed, the number one issue was IP protection. That's why it's number one on our list too. Without it, we'd get nowhere.

• (1130)

Hon. Dan McTeague: I'll ask Mr. Dale, if I could, Mr. Chair.

Mr. Jeffrey Dale: To add to what Tom was saying, you also have an environment right now where there's collaboration going on with researchers. So you can get researchers from multiple institutions working on it, and they each have different IP policies. Our concern is the varying differences between the IP policies that exist. If you have multiple researchers from two universities and a federal lab, you could have three or four different IP policies you need to deal with.

That scares away companies, as well as what Tom was saying. How do they protect that? When you go to an organization and they hand you their IP rules, and it's this thick, if you're a small company you don't have the time to hire a lawyer to review that policy and how you would interact with it.

Hon. Dan McTeague: I'm also intrigued with the comments that have been made with respect to the overall challenges and barriers to commercialization. This is a country of great thinkers. You are churning out—day in and day out—individuals who are at the leading edge of a number of world challenges, and this is extremely critical for us.

I really want to get to understand the disconnect, Mr. Dale, that you talked about between the venture capitalists and investments. What, in your view, is the trigger? What is the problem there? Why are we seeing a decline in the number? You talked about unclear terms; perhaps you could explain that a little better.

Mr. Jeffrey Dale: To go into the troubles of the venture capital industry would take us more than the time allotted here. Suffice to say that what I was trying to get at is that we've made some terrible mistakes with the venture capital industry over the past ten years. We have. We invested in companies at higher valuations than we should have during the late 1990s. We're a young industry; we did not have the management potential to carry them through.

If you take a look at our venture capital industry overall, they have not seen a positive return, so many of the funds that are going out today are having a hard time generating new funds to start off with.

Combined with that, we've now seen the Canadian chartered banks almost completely exit the venture capital asset class. In my very limited discussions with them, a lot of this—as I understand—has to come with the new Basel rules, which state that if you have a high-risk investment—like venture capital asset class—you have a higher rate of reserves that you have to keep on that asset class. I understand the rules, but if our own banks aren't going to be investing in our innovation and putting the money in, we're in big trouble, because there are no larger pockets. Our pension funds aren't there yet either, and we need to create a climate. There needs to be some leadership to create a climate to have these large LPs invest in the venture capital asset class.

Hon. Dan McTeague: Do I have any time left, Chair?

The Chair: You have one and a half minutes.

Hon. Dan McTeague: I won't be that long.

It seems to me that a lot of government priority tends to be on technologies evolving from the environment. That's certainly our position, as a government. I'm sure the current government is continuing that. This is perhaps to *tous les témoins*. Do you get the sense that there is perhaps a need to reconfigure the priorities to all science and technology with results, commercialization possibilities beyond the issue of the environment? Do you get the sense that the Canadian government is only heading in that direction, backing its best only in that sector?

I will leave that for all of you.

Mr. Tom Corr: I don't. We see a pretty good balance coming out from the federal and the provincial granting agencies of where the funds are to be deployed. Clearly, there is an emphasis on environmental issues these days, but there is no shortage on balance of funding for the other areas if you have something that is fund-worthy, if you will.

The Chair: Thank you.

Madame Brunelle, please.

•(1135)

[*Translation*]

Ms. Paule Brunelle (Trois-Rivières, BQ): Thank you.

Good morning everyone.

Mr. Gavrel, in a message contained in a report, the President of the Networks of Centres of Excellence observed that since the creation of the NCE program in 1989, 117 young research-minded companies have been launched. That is a very interesting statistic, given that we are looking for new, innovative companies.

Can you give us some examples of successes that have been achieved through the efforts of these companies?

Mr. Jean-Claude Gavrel: Certainly. I can tell you about a few successes. Perhaps the best known company is Genome British Columbia. Several years ago, \$45 million was invested to launch this company.

Mr. Johnston can surely tell you about a number of his companies. One is Precarn, a company that managed one our networks, the IRIS network which operates in the area of information technologies and intelligence systems. Another is Point Grey Research which is based in Western Canada. I probably should have brought along a list of these companies with me, but we can certainly send it to you.

In a study of all young spin-off companies — I will not get into specifics for now — Denys Cooper of the National Research Council of Canada's IRAP group noted that companies launched under the Networks of Centres of Excellence program were better able to attract investments and to succeed in the long run. The program encourages partnerships. It also sets standards for intellectual property management, something that was mentioned earlier. Standards are set so that the products of collaborative efforts by partners within these networks can be commercialized. These are steps that we have already taken, hence the program's success in terms of the number of companies launched.

Ms. Paule Brunelle: Priorities are identified when the decision is made to subsidize research activities. Is the success of these companies proof that we are targeting the right research niches? Does their success prove that Canada is sufficiently forward-looking in the research field?

Mr. Jean-Claude Gavrel: Without a doubt. In terms of the program priorities first identified in 1989, if we look at what's happening in the rest of the world, Canada's priorities have always been properly aligned. Our priorities have been information technologies, biotechnology and applications in key domestic areas, including natural resources and the environment. We have always pursued these priorities which, fundamentally, we share with all governments and our OECD partners.

So the answer to your question is yes.

Ms. Paule Brunelle: You all talked about commercialization. Obviously, this is the central consideration. Companies conduct research in order to commercialize their findings.

Are there other ways to improve Canada's performance in this area?

Mr. Jean-Claude Gavrel: There are always ways of improving commercialization activities. The granting councils — in particular, NSERC, CIHR and SSHRC — emphasize this aspect. They work closely to improve the focus of some of the technologies that we develop, and to help the people who are the driving force behind these initiatives. I believe some of my colleagues alluded to this earlier.

No only does technology transfer involve technology, above all it involves people. One of the areas we need to focus on more in Canada is the training of persons in the area of commercialization. As a granting agency, we provide support for the development of innovative scientific skills but quite often, what is lacking in Canada is commercialization and marketing expertise. This is a weakness that we are working hard to overcome. In a recent evaluation of the NCE program, we recommended among other things that an effort be made in this regard and we plan on following through with this.

• (1140)

Ms. Paule Brunelle: This committee has heard about the serious shortage of highly qualified workers in various areas. You are talking to us about a new field.

Are we doing everything we need to do to go out and find people? Are we training enough people? Should we be planning for the future or should we be looking abroad for qualified researchers?

Mr. Jean-Claude Gavrel: I think that for some time to come, we will need to ramp up training activities and go out and find people wherever they may be. That is the reality of the world in which we live. We are operating in a global economy. People are highly mobile, in particular people with the skills in technology and advanced innovation that we are searching for. We have to expect that these individuals will go where optimum conditions exist. One of the ways that we can retain some of these individuals is to ensure that our companies remain viable entities

The federal and provincial governments have invested in our universities for many years and now we have caught up with the rest of the world. We have nothing to apologize for in that regard. We offer tremendous opportunities to researchers. We are starting to see industrial clusters emerge. For example, we are starting to hear about the Waterloo region. We all know about the Ottawa area and about everything that is happening in Western Canada and in Montreal. This potential needs to be developed further. As we have been told, our companies need to grow from \$40 million, \$50 million and \$60 million operations to companies worth in excess of \$100 million. There are still not enough companies of this magnitude in Canada. The challenge we face is indeed a formidable one. Smaller companies are vulnerable to being preyed upon — perhaps that is too strong a word — by other international companies that can easily shift the commercialization centre.

[English]

The Chair: Merci, Madame Brunelle.

We'll got to Mr. Carrie, please.

Mr. Colin Carrie (Oshawa, CPC): Thank you very much, Mr. Chair.

I wish we had more time with you today, because I think we could talk to you for hours and hours. The whole idea of this S and T strategy is to get recommendations from witnesses and experts in the field, so when you're answering my questions, I was wondering if you could really focus on what specifically you're recommending to us as the government.

As Mr. Johnston was saying, we've continually heard that Canada is not so good at commercialization. First, what are you doing to get industry into universities and what more could the government do to get industry into universities?

Second, in a comment about strategic procurement, Mr. Dale talked about the Information Technology Association of Canada. When we hear about procurement, quite often we're thinking about the government buying planes, trains, or automobiles, but it seems that there's a great opportunity for buying services, especially in technology.

Could you comment on those two questions?

Mr. Jeffrey Dale: Do you want me to go first?

Mr. Colin Carrie: Sure, if you'd like.

Mr. Jeffrey Dale: In terms of what OCRI is doing to help companies get into our university program, we're very fortunate that on our board of directors we have the two local university presidents, one of the colleges, and one of the federal research labs.

This process, though, of bringing companies into academia—we call it a full body contact sport. It doesn't happen naturally. There are cultural differences and skill set differences that need to be worked on. There's no cookie cutter for it. You bring them in and find out what their needs are.

Ten years ago companies were willing to invest in research, co-sponsored research. They're not interested as much any more. If you go to our major companies, RIM and Nortel alone are not doing matching programs anymore, but what they are extremely interested in is access to the people, the students. That's why I was saying our investments in research now are investments not only in intellectual property but also in very skilled people, so our access right now tends to be bringing these companies in and introducing them to the professors and the students for longer-term relationships. Then that turns into an IP transfer that comes out in the form of the students and what they've been working on. That's the number one thing we do.

What can the government do? Our recommendation was on an IP policy that would level the playing field for everyone so that everybody would know how they could deal with IP. You still want to protect the IP and you want to protect the inventors of it, but you need clear rules as to how companies access that IP, pull it out, and then look at commercializing it, because in pulling it out, you actually have to pull the people with it in order to be able to make it work.

In terms of the strategic procurement process itself—

• (1145)

Mr. Colin Carrie: Excuse me, but could you be a little bit more specific about the IP and what the government could do to make sure that they own it? I know Waterloo has a great policy, but that's a university-set policy. What can the government do specifically to help that along?

Mr. Jeffrey Dale: I think you need to specify standard rules about how intellectual property can be transferred to the private sector and who owns it. There are all kinds of different variations that you can have on it, but there are no set rules now from any of your granting councils as to what happens with the IP that's generated from it. All I'm suggesting is that there could be significant advantages to having a high-level policy. And I'm not talking about overriding other policies that might exist within the university. I think you have to complement them, but you have to make sure that there is equal access for all.

The Bayh-Dole Act actually gave an unfair advantage to commercializing the technology locally. The Ontario government recently, as you know, announced that it's going to give a tax-free holiday to all IP that comes out of any Canadian university, college, or lab or that is commercialized in Ontario. Those companies for ten years will have a tax-free holiday in Ontario. That's a high incentive to try to commercialize the IP. If the federal government would like to piggyback on that, I'm sure it would raise some eyebrows.

The Chair: Okay.

I have Mr. Johnston, and then I have Mr. Gavrel, who wants to comment as well.

Mr. Johnston.

Mr. Paul Johnston: I simply wanted to emphasize the body-contact nature of the sport, as well. Again, to go back to our model, which I referred to earlier, in which we have an end-user at the table in a research project, we also insist that there be a university at the table. Therefore, the actual research and development activity—research, development, commercialization—has all of the players implicated in the research project, so that by the time the research project is over, the company is in a position where it has a working prototype; it has had access to the universities and perhaps community colleges as well, and the process of getting these people to work together can really enhance the body-contact nature of the sport.

The Chair: Okay.

Mr. Gavrel, you have about 30 seconds.

Mr. Jean-Claude Gavrel: I have two quick comments.

First, the granting agencies have a standard policy on IP commercialization, and they are reviewing that policy. So, Jeffrey, we'll certainly go to you on this one. Consultations are starting now.

The second comment is that the granting agencies are also partnering with other organizations. There's, for example, a Business Development Bank of Canada, National Research Council, and Natural Sciences and Engineering Research Council joint program to look at the whole spectrum of supporting discovery transfer to industry as well as funding. This is in the area of nanotechnology, and the results of an initial competition were announced just recently.

The Chair: Okay, thank you.

Thank you, Mr. Carrie.

We'll go to Ms. Nash, please.

Ms. Peggy Nash (Parkdale—High Park, NDP): Thank you.

Hello to all the witnesses.

Mr. Corr, my first question is to you.

We've seen in the whole Cambridge-Kitchener-Waterloo area an absolute explosion of success, and you've described the status of that success. Can you describe for us what the trajectory was to build the success there? You said that the ability to transfer IP rights was fundamental. Can you just tell us how that developed?

Mr. Tom Corr: Sure I can, and it goes back 50 years.

I think you have to understand that what goes on in Waterloo isn't a program or a policy, it's a culture that's been there since the university started. If you take a snapshot of where we are today, the reason I think we're successful, from a university standpoint, is that we're blessed to have a president, David Johnston, whose attitude is that the research that goes on at the university should be helped to create economic activity. That doesn't mean taking some intellectual property and licensing it to some company in the States. What it means is, where possible, creating jobs by creating spinoff companies and getting behind them. So that's the first thing.

Secondly, the culture at the university is very much that doing start-ups and spinoffs and licensing intellectual property from the researchers is looked at in a very positive way. At some universities—in fact some I've worked at previously—some of that commercialization is viewed negatively. It's not pure research. It's not basic research necessarily, and it's viewed negatively, especially by some of the old-timer academics.

The third thing that we have going for us is that the students going through the co-op program typically spend five years taking what would in another institution be a four-year program, but two of those years, including the summer holidays, they're out working in industry, and many times they're working for other start-ups. So when they graduate from university, doing the start-up is not something that scares them, it's something they expect to do, whereas at other universities it might be viewed as an exception.

Lastly, the culture of the community is very supportive in Waterloo, so we have organizations like Communitech. We have other organizations that give back, that provide mentoring, provide support, and provide a local base of investment capital through angel investors that are there to take these start-up companies through the very early stages, when they're most at risk, in terms of raising funding.

I wish I could say here's the magic solution, what you need to do to kind of replicate Waterloo's success, but it's so much more than just one thing. Without all those things at play, I think that just putting a program somewhere isn't the answer. You need to address all these issues, and without doing that, it simply won't work.

• (1150)

Ms. Peggy Nash: Thank you for that.

If someone asks what you get back if you're allowing this transfer of IP rights, what you're saying is that the quid pro quo has been the requirement that there be jobs and investment in the community, so the spinoffs are visible for that community. It's not simply that it's out of control, out of control meaning that it's transferred elsewhere and you never see the benefit from this technology.

Mr. Tom Corr: In the technology transfer in the office of research, we promote spinoff companies where other universities tend to frown on them because there's risk involved. It's much easier to license some IP to an existing company and let them run with it, collect a royalty, and that's it. It does nothing for the local community, however. So that's one of the things we tend to focus on.

However, we still have the challenge of this sort of valley-of-death financing after the commercialization funding that's available through organizations like NSERC and through the Ministry of Research and Innovation through the provincial government. There is still a huge gap in funding, and that gap, in Ontario at least, has been created in part because of the demise of the labour-sponsored investment funds. These funds provided, at one point in Ontario, up to half of the venture capital investment, and since that program is being phased out by the provincial government, about \$500 million a year has been sucked out of the venture capital community in Ontario. It's a huge amount.

The provincial ministry has done a great job of introducing new programs specifically aimed at that space through the Ministry of Research and Innovation, but it's only a drop in the bucket when you compare it to what has been sucked out of the investment community.

Ms. Peggy Nash: Thank you for that.

Mr. Dale, I'm interested in your comment on strategic procurement. It makes a lot of sense to me that when a fledgling company is starting out, trying to build its credibility and reliability and showing that it can move forward, the government should not abandon it at that point.

What more are you specifically recommending, and what could this committee recommend that would...? I really like the way Mr. Corr has put this, that we see the tangible benefits of these spinoff companies. It's a real boon to economic activity and a boon to our communities. So what's the next step? What should this committee be recommending to the government to help with that next step?

Mr. Jeffrey Dale: I'm certainly not recommending that you go into the procurement process completely, because that's a very long process. But what I am recommending is that there may be an opportunity to look at a situation where Canadian innovation has come out of federally sponsored research activities and there's either a start-up or an existing company that is commercializing a product and looking for that first customer, that they would have some avenue to go after, similar to an unsolicited proposal type of process.

ITAC modelled their strategic procurement offer around that process. This meant you could make an unsolicited proposal to utilize this technology and find a customer inside the government. The existing program for unsolicited proposals makes it very difficult to get your proposal accepted, but putting some rules around Canadian-based IP, companies are looking for their first customer and how they would access the government, because many of them know what agency within the government they would like to target as that first customer. So giving them the advantage of finding that first reference customer within the government as a paying customer and as a reference customer on feed-back for that trial would be my recommendation.

• (1155)

Ms. Peggy Nash: Thank you.

The Chair: Mr. Gavrel, you wanted to comment. Very briefly, please.

Mr. Jean-Claude Gavrel: Simply to add that a success story in this area has been one of our networks, the intelligence systems for innovative structure. We've been developing new technologies for bridge repair and concrete deck surface changes and rehabilitation. They have worked for 14 years closely with government, both at the provincial and federal level, with Public Works, with Transport Québec, and with companies both in Quebec and in Manitoba, and have now brought new technologies. Also, they have brought something that is key in this industry, and that is changes to the building code that allows the use of those new materials that will replace steel in concrete structures.

So these things happen, but they sometimes take a long time to develop the solutions.

The Chair: Thank you.

Thank you, Ms. Nash.

We'll go to Mr. Simard, please.

Hon. Raymond Simard (Saint Boniface, Lib.): Thank you very much, Mr. Chair.

Thank you for being here this morning.

I would like to continue on strategic procurement for a few seconds, Mr. Dale, if I may. If your country doesn't buy your technology, you have a problem. That seems to me to be the first step. An example that I use is Magellan in Winnipeg, which developed a satellite and was up for tender with the government and lost to a U.K. company. The reason the U.K. company could produce it cheaper is because the U.K. government had sponsored four satellites with that company.

Again, we have to respect trade rules, which is another issue we have. What do you recommend specifically? Because with all the treaty rules that are now in place with our free trade agreements we can't favour Canadian companies. I'm not sure that what you just proposed is possible—in other words, having selective bids for those young companies.

Mr. Jeffrey Dale: I don't profess to be a trade specialist, so I can't help you with that. I know that other jurisdictions, especially in the United States and Mexico, which we have NAFTA agreements with, are supporting their small businesses and buying their products. They're doing it under defence programs and under the SBIR program that Paul mentioned. They're doing it, and they're under the same GATT rules and NAFTA rules that we are.

I would put it back to you that other jurisdictions are finding a way to support it, and that we also need to find a way to support it. I'm not sure if my proposal with respect to the sole sourcing complicates the matter, but I know we need to create a program that gives the advantage to Canadian innovation.

Hon. Raymond Simard: We have to find a way.

Mr. Jeffrey Dale: We have to find a way, as others have.

Hon. Raymond Simard: You've probably heard that this committee is traveling within the next couple of weeks, and one of the things that attracted the committee, it seems, by the agenda, is big science projects: the Canadian Light Source Synchrotron in Saskatoon, and the Level 4 Canadian Science Centre for Human and Animal Health in Winnipeg. How beneficial are they, compared with smaller research programs? Do we get much more out of these big science programs, and is Canada doing enough of these?

Mr. Jean-Claude Gavrel: We need big science in Canada for a number of reasons. We need big science to attract the best scientists, to be part of the club internationally, and to focus on the areas where we have clear benefits.

You mentioned the Canadian Light Source Synchrotron, and I think that's a superb example, which could have significant commercial benefits. They're providing a fabulous research environment for the small companies to go and test a whole lot of new ideas, technologies, etc.

These things have been very helpful in the past and will continue to be. We have a nuclear industry in this country that was initially positioned by significant government investment, and we need to continue that.

Hon. Raymond Simard: Mr. Corr, you have indicated that Waterloo allows their researchers to own their own IP. Can you tell me if you're the exception to the rule? Is this something that is now happening in many universities? Is it a standard formula? Do universities usually share the IP with researchers? How does it work?

Mr. Tom Corr: Most of the universities have a policy whereby the ownership of the IP is split between the researchers and the university, so that the universities can gain from commercialization. The university shares in the funds that are generated through either royalties or ownership in the company.

Our philosophy is different. Our philosophy is that the results of the gain should go to the researchers and the people who created the IP. This gives them every incentive to move forward with commercialization. Working at other institutions, I've found that if they don't have a financial incentive to move it forward then many times the IP just sits on the shelf. They would rather do more research than get some small percentage of what may come from the commercialization.

That's our view of it. Many universities believe that taking a percentage of the royalties generated by commercialization will somehow fund their technology transfer operations. Frankly, there are a handful of universities in all of North America that actually pay their own way.

The universities have to look at commercialization as simply a cost of doing business, a way to attract good researchers, to attract industry to the table to make it easier for them to live with. We get our money back in spades—way more than we get through royalties.

For example, over the last number of years, RIM has given back to the university community and research institutions, through their founders, over \$200 million. This isn't money that they had to pay back because the IP was originally developed here and there was some contract to do so. It's because they feel that the community gave them this opportunity and they're simply donating funding back. They are one of the many companies doing this.

● (1200)

Hon. Raymond Simard: We don't talk a lot about the indirect spinoffs. We talk about the commercializations, which are direct. In Winnipeg, for instance, Smith Carter Architects and Engineers Incorporated has now been involved with the last four to five projects undertaken by the level-4 lab. It generated \$1.2 billion in revenue for these guys.

We don't talk about that indirect spinoff. Are there examples of that?

Mr. Tom Corr: There are many. If we look at the economic activity generated through our spinoffs, we have thousands of employees in the Waterloo region—250 spinoffs from the University of Waterloo alone. There are many suppliers and many more customers. There is a lot of indirect economic activity created through spinoff activities. It goes far beyond the company itself.

The Chair: Thank you.

We'll have Mr. Van Kesteren.

Mr. Dave Van Kesteren (Chatham-Kent—Essex, CPC): Thank you.

Thank you to the panel for appearing before us again today.

I am intrigued, Mr. Corr, by your policy at Waterloo.

We had the privilege of meeting with a bunch of Google executives, and these guys are amazing. It's an amazing company. They've pretty much thrown off all the traditional ways of running a business. They seem to attract a whole new crowd.

My question is, first of all, whether you find the same thing happening at Waterloo. Is there a revolution of sorts? I think this probably happened with the inventors of Microsoft and Mr. Gates and that group of people. They seemed to have just started this revolution, which created this incredible industry in the United States. Are we seeing the seeds of that in Waterloo at this time?

Mr. Tom Corr: I can just speak to the results. I don't know if what we're seeing is a revolution. But I think that the culture in the community; the IP policy; the attitude the students come out with—they're not afraid to do a start-up; the capital that's available; the community that gives back, both from an investment standpoint and in terms of spinoff companies; and the mentors who are there all came together to create what is the magic of Waterloo today.

Again, I don't know if that can be replicated elsewhere. I know that it works in Waterloo, and it works well. I think the danger, again, is in trying to just nail it on one thing—if we had this program and replicated it everywhere else, it would work just fine. I think that if the culture isn't there, from the university and right through the whole community, it's tough to replicate.

It's working, and that's pretty much all I can tell you.

Mr. Dave Van Kesteren: First of all, this was a decision made by Waterloo. The question would be whether this is something that is also adopted by other universities. Can the federal government ask them to do it? Will the result of your policy be that you're going to attract so many of these young, bright new minds that the other universities will follow suit?

Mr. Tom Corr: The IP policy we have is just part of the puzzle in terms of the commercialization successes at Waterloo. We're very easy to deal with. If a company or an investor wants to know who owns the IP, just talk to the guys who created it. It's theirs; end of story. You're not dealing with the university research departments assigning IP, taking back IP, or saying "I want 25% of this". Sometimes universities can be very hard to deal with when they're dealing with commercialization. They think they have something worth a zillion dollars, and they want a big piece of it. In fact, it's worth nothing until somebody commercializes it. So it's very much an attitudinal thing.

If I were trying to come up with a policy for other universities to adopt, I think it would be to give it to the researchers so that the incentive was at the right place to make the commercialization happy. Or it would be to be very easy in terms of dealing with industry and investors to help make it happen. The more blocks you put in their way, the more likely they'll be to say "Oh, forget it, we're just going to do it ourselves".

●(1205)

Mr. Dave Van Kesteren: To play devil's advocate, if I were a student, I'd want to work on some of the technologies that are going to have big benefits and big payoffs. Are we losing, possibly, down the road, somebody maybe discovering an innovation of scientific benefit?

Mr. Tom Corr: Not at all, because at the root of this commercialization opportunity is basic research that's being done by the professors and the researchers. And that's being dictated by the grants they get through NSERC and the other granting agencies. What we're seeing is basic research being done, but we're seeing more of an incentive, perhaps, at Waterloo for having this basic research turned into commercialization opportunities, because there are financial incentives for people to do so.

I don't think there's any less or any more pure research, on a relative basis, going on at Waterloo than anywhere else. I just think we're grabbing opportunities from this research and trying to commercialize it, where perhaps others aren't.

The Chair: Thank you.

Go ahead, Mr. Dale.

Mr. Jeffrey Dale: I just have a quick comment about what Tom was saying.

There are many different policies. As an example, in Ottawa, Carleton University has the same policy as the University of Waterloo. Ottawa U has a combination policy in that it's university-owned and inventor-owned.

What you actually see is that the granting councils right now and the research we're doing are attracting some really young, bright minds. In any institution, you can walk in and identify what we call the low-hanging fruit. These are the researchers who want to deal with industry and want to try to commercialize their products. They have a high need to get out there to try to find out how they can make money from their research. We spend a lot of time trying to identify those researchers, and then we pair them up with entrepreneurs and/or companies.

The Chair: Thank you.

Thank you, Mr. Van Kesteren.

We'll go to Mr. Vincent.

[Translation]

Mr. Robert Vincent (Shefford, BQ): Thank you, Mr. Chairman.

Good morning everyone.

I read your submission, Mr. Johnston, and I found it to be quite interesting. I'd like to read a few excerpts:

As noted by the Conference Board of Canada in its June 2007 report, *How Canada Performs: A Report Card on Canada*, we as a nation have not been good at managing the innovation system; we have not been good at integrating our efforts along the continuum. Canada was given a mark of "D", putting us 14th of the 17 countries studied. At page 63 they note:

Canada's ranking in the innovation domain reveals underlying deficiencies; we are not keeping up with other countries on the commercialization of knowledge.

Further on in your submission, you note:

Part of the difficulty to date has been the failure of governments to recognize a simple truth inherent in the above system: companies create wealth in the innovation system by commercializing products and services; universities do not.

You also say that R&D activities must be linked to the needs of the marketplace and of clients.

My question is for all of you. What can we do to promote commercialization? What steps can we take to ensure that government funding of all research systems produces better results?

[English]

The Chair: Mr. Johnston.

Mr. Paul Johnston: If I could, I'll start.

Of course the issue is huge for Canada, and a lot of it is structural. Mr. Corr has talked a couple of times about how it's the culture in Waterloo, the culture of the University of Waterloo, and the innovation sense there that are important. You can't just put one finger on it and say this is the problem.

Similarly, in Canada, all the structural issues of our history, way back before all you young people were born, involved the hewers of wood and drawers of water, and we did not have to innovate in order to be rich. Currently, in Canada, we need to take advantage of the fact that we have a wealth beyond some of our partners, and we have to start to reinvest that back into innovation.

There is the branch plant issue that keeps cropping up in Canada. That is, a company owned by a British, American, or Japanese firm probably does its R and D and its innovation at headquarters. So these are issues you can't necessarily do a lot about.

But I do agree completely that it is a cultural issue and we have to try to change the culture. One of the programs we support with the government of British Columbia, for example, is a joint scholarship. The scholarship has to have two people in it, and they both have to get a scholarship. One is an engineer and one is a business student. They have to work together on the same technology, one of them developing the technological solution and the other one developing the business case, together. What it's trying to do is create a culture where the engineer understands the commercialization aspects and the business person understands the technological aspects.

It's a very small, tiny little program, but it's the kind of thing, for example, that the NCE program, Waterloo, and OCRI know well, where you actually have to start just working on the people, changing their approach to life, so that their goal is not to finish university and get a job; their goal is to finish university and create 100 jobs.

• (1210)

The Chair: Anyone else?

Mr. Gavrel.

[Translation]

Mr. Jean-Claude Gavrel: I would like to talk about the human dimension, whether it be about culture or training. More young people must be encouraged to study science. As Paul was saying, very often in Canada, we were in the habit of operating like US companies. Instead of creating innovation, we were content to commercialize it. That is the key. If you look at various government programs, whether Canadian programs or those of EC or Asian nations or the United States, you will see that everyone deals with these problems the same way.

I don't know if everyone agrees with the grade we were given by the Conference Board. It was very hard on us, but in Canada, we are often harder on ourselves than on others.

[English]

The Chair: Mr. Vincent.

[Translation]

Mr. Robert Vincent: The government invests in innovation and research, but there is no one to commercialize an idea or product. If we invest several million dollars in innovation and are unable to find anyone to commercialize the products, then what is the point? Perhaps we should be doing less research, focusing only on more advanced research. We need to be closer to the people to know how to help them. What is the point of research that doesn't amount to anything?

Mr. Jean-Claude Gavrel: In essence, this is what the government is doing through new programs such as the Centres for Excellence in Commercialization and Research, the Science and Technology Strategy for priority areas and new business-led networks announced a while back. We are trying to resolve the problem by focusing on downstream activities such as commercialization, with research being an upstream activity. The granting councils, the new programs and the Science and Technology Strategy are all working to promote more research in areas in which opportunities exist.

For example, one of the models that we present to businesses is the business-led model. We ask companies to tell us about their research needs. Perhaps we have not made sufficient use in this country of our strong industries...

[English]

The Chair: Monsieur Gavrel, I'm sorry, but we're way over time. Thank you.

Ms. Scarborough, did you want to comment just briefly?

Ms. Michelle Scarborough (Vice-President, Investment and Commercialization, Ottawa Centre for Research and Innovation): I just wanted to make a quick comment with respect to the ecosystem of commercialization and investment, generally. A lot of people have echoed that here.

Really, the bottom line is that there's a lot of appetite in the Canadian marketplace, generally, to commercialize products into the market. The government perhaps needs to look at how to integrate an approach that allows commercialization activities to take place. That means pumping up talent and providing incentives to investors to make those investments in early-stage companies happen.

Those are my two cents, very briefly.

●(1215)

The Chair: Thank you.

Members and witnesses, I'm very sorry to have to do this, but there are two motions from two members of the committee today that they want dealt with. One option is, if you are interested in coming back, I actually have other members on the list who do want to ask questions, so there's obviously interest in continuing this discussion. If you would like to return, perhaps you could indicate that to one of our research assistants. I'll have them come back to chat with you briefly.

I know there's perhaps a spot open this Thursday, if you're available, or we could have you later in June, if that's amenable to your schedules. But there is an interest in continuing this discussion.

I apologize for cutting this short, but I do have two motions from two members that I do have to get to as the chair.

I want to thank you very much for your presentations here today.

I have a couple of items.

Mr. Dale, in response to Ms. Nash's question and in your presentation, I think you referenced some reports. Could you send us an e-mail with the website links to those reports? Or if you have paper copies, you could submit them.

Thank you very much.

Mr. Jeffrey Dale: Okay, I'll link you to that strategic procurement report.

The Chair: I appreciate that.

One of the things I think you mentioned, Mr. Gavrel, was getting specific examples.

If all of you, especially in terms of commercialization—Mr. Corr, you mentioned valley-of-death financing, for example—have specific examples of a product that was commercialized and adopted here in Canada and the stages it went through, these would be very enlightening for the committee to know. If you have examples you want to provide to the committee on that, please do so.

If you do want to come back, we'd certainly welcome you. So if you can indicate that to Eleanor or Lalita, we'd appreciate that.

We thank you for your presentations.

Members, we will go on to the motions, starting with the motion by Ms. Nash. I'll suspend for one minute, and then we'll come back.

The Chair: We will go to the motion by Ms. Nash.

Ms. Nash, everybody has a copy of your motion, so you can speak to your motion.

●(1220)

Ms. Peggy Nash: My motion is based on the discussion at our last committee meeting, where we heard from some of the pharmaceutical industry and the generic industry. There were many unanswered questions about the change that has been proposed by the federal government to the regulations under the Patent Act. One of the problems seemed to be lack of notification and the very short consultation period. So my motion basically is calling for a halt on making a change until there has been more public consultation. That's the nub of my motion.

The Chair: Okay. Thank you.

Mr. Carrie.

Mr. Colin Carrie: I would just like to let the chair know that we will be voting against this motion.

The Chair: Okay, thank you, Mr. Carrie.

Mr. McTeague.

Hon. Dan McTeague: Mr. Chairman, I was very disappointed with the timeframe. Regardless of where we think we are or the last-minute briefings that we have been given by the department and by the parties affected, this is a long-standing issue that, in my view, the government tried to sweep under the rug in a very, very short and deliberately brief period of time.

Chair, this is a position taken that for the first time very clearly enunciates that someone within the department has taken it upon themselves to be in contempt of what I think is the long-standing process of allowing at least a reasonable time for commentary. And more importantly, other committees, such as the Standing Joint Committee for the Scrutiny of Regulations, may be more interested in looking at the appropriateness of having a decision, which is well documented in the public domain, rushed by a decision by the department without consultation to members of Parliament, leaving us very little if any time. Indeed, if I am to take it that some members were consulted yesterday, Chair, it was done exactly a few minutes before the time for commentary was over.

Mr. Chair, you'll recognize that I did discuss with you and with others my overarching concern a week ago, when I first learned of this. And I thought the best solution would have been for this committee to at least make a request for a delay until at least one of the affected parties gets a chance to comment. I now learn that it's not just the generics that will be affected by this, but clearly consumers and the provinces.

I'm also concerned not just about the act being, in my view, in contempt of this committee and in contempt of Canadians, but it's also contemptuous of the Supreme Court of Canada. And whatever the merits of the debate are, they could have been thrashed out if the government had actually chosen, as it has in the past, the time-honoured position of informing all parties.

And I understand the argument that is being made that, yes, they should have known about it—here it is, there it is—but considering the amount of effort, considering the amount of legal work that has been done in this area with respect to notice of compliance, no matter what the thing is in terms of streamlining or updating these things, I find this is one of the most odious things.

I certainly have no difficulty with my colleagues on this committee. I think they've all worked very well. But I think in cases of equity and fairness we should be providing that time. I have absolutely no hesitation with supporting this motion.

I would also, though, perhaps want to contemplate an amendment to the motion, which would be that the committee also refer this matter to the Standing Joint Committee on Scrutiny of Regulations, and that it holds the Department of Industry in contempt for having attempted to put this out in a very short period of time with respect to notice.

It is unprecedented. It's unacceptable. No reasonable member of Parliament who is worried about doing through the back door what you can't do at the front door, considering the history of this very important issue and its implications on all our constituents, should take comfort with the idea that this is something we can simply dismiss.

Thank you, Chair.

The Chair: So your amendment would read as what?

Hon. Dan McTeague: I'll just be a moment here, Chair. Chair, I have not had this discussion with Ms. Nash or anyone else, but I would—

• (1225)

The Chair: I have Mr. Brison on the list. Do you want me to continue the discussion on the main motion?

Hon. Dan McTeague: Yes, otherwise there will have to be a question of debate on the amendment.

The Chair: So did you want to move your amendment?

Hon. Dan McTeague: Yes. I move that the Standing Committee on Industry, Science and Technology urge the industry minister to not move forward with the implementation of the regulatory amendments to the patented medicines regulations of the Patent Act published in *Canada Gazette* part I on April 26, 2008.

The Chair: And you would leave in “Furthermore...”?

Hon. Dan McTeague: Furthermore, the committee requests an extended period of consultations. In light of this, the committee.... Go ahead.

The Chair: Go ahead.

The Clerk of the Committee (Ms. Michelle Tittley): For the clarity of the committee, I'll read it back, beginning at the beginning of the motion, and I will indicate where the amendment fits in:

That the Standing Committee on Industry, Science and Technology urges the industry minister to not move forward with the implementation of the regulatory amendments to the patented medicines regulations of the Patent Act published in *Canada Gazette* part I on April 26, 2008

The amendment would read:

and that it refer the matter to the Standing Joint Committee on Scrutiny of Regulations.

The motion would continue:

Furthermore, the committee requests an extended period of public consultation.

The Chair: Okay. I have Mr. Brison on the main motion, but now the debate will be on the amendment. Mr. Brison, did you want to speak to the amendment?

Hon. Scott Brison (Kings—Hants, Lib.): I can wait to speak on the main motion.

The Chair: Okay, we'll keep you on for the main motion.

We have Ms. Nash for the amendment.

Ms. Peggy Nash: I have a procedural question about Mr. McTeague's amendment. Would that mean that after that scrutiny, the motion would return back to our committee, or is this a referral, meaning that the committee for scrutiny of regulations would take control of this motion? I assume it would come back to our committee.

The Chair: We'll let the mover of the amendment clarify that.

Mr. McTeague.

Hon. Dan McTeague: Thank you.

Ms. Nash, the committee on scrutiny of regulations follows several criteria under which a regulation can be assessed and can be deemed appropriate. It's a very small and often obscure committee but with tremendous power.

My instincts tell me that the committee would probably find the rush to the *Canada Gazette* to be in contempt of their criteria. I would therefore urge that the reason for putting it there would be that it would also be something else further for the minister to consider and contemplate. Given the timeframe and the lack of consultation, that is something that concerns us all here.

The Chair: Does that address your question, Ms. Nash?

Ms. Peggy Nash: If I could, Mr. Chair, does that mean that after the committee scrutinizes this and makes its determination, we are still seized with this motion? Is this still an item before the industry committee?

The Chair: Your motion itself, as I read it, does not call upon the industry committee to do anything. It calls upon the industry minister to not do something.

I know you're asking a question, and I'm asking you a question, but I don't see what this motion asks the industry committee to do.

Ms. Peggy Nash: Yes, let me rephrase that. It would still be a matter for the Ministry of Industry, obviously, because it's their regulatory change. So they will still be holding the consultations if they accept this motion for further consultation.

The Chair: If it passes with the amendment, it would still ask the industry minister to not do something.

Ms. Peggy Nash: Okay. Thank you.

• (1230)

The Chair: I don't have any other speakers on the amendment. I call the question on the amendment.

(Amendment negatived)

The Chair: Now we will move to the main motion. I have Mr. Brison on the list.

Hon. Scott Brison: The previous regulatory changes or proposals under the previous government involved very extensive consultation and engagement with stakeholders. I find the 15 days unacceptable. The minister has put this committee in a position where we've been effectively excluded from the opportunity to be engaged in learning more about this as legislators. In fact, the stakeholders themselves were not engaged sufficiently and early enough.

Later I will be proposing a motion that the committee send a letter to the minister expressing our disappointment in that lack of consultation, and that in future cases the industry committee itself should be used as part of the outreach for these kinds of consultations with stakeholders. We are perfectly positioned as a committee to constructively help the government evaluate these. If you look at pre-budget consultations and use the finance committee as an example, there are ways we can help contribute to sound government policy. We were effectively excluded from this.

I have concerns, after regulations have been gazetted, about the message they send to the investment and international community on our commitment to patent protection—to effectively seek a further extension once the regulations have been gazetted. So I will not be supporting Ms. Nash's motion, but I will be proposing a motion later that the committee express to the minister very directly that this lack of consultation and engagement of the committee is something we do not want to see again.

The Chair: Okay, thank you.

I have Madame Brunelle and then Mr. McTeague.

[*Translation*]

Ms. Paule Brunelle: Generic drug companies in particular are guilty of a lot of misinformation. Having listened with an open mind to what officials told us yesterday, I understand that the aim of this bill is not to bring in changes, but rather to restore the situation that prevailed in 2006. With the freezing of the patent register, innovative pharmaceutical companies agreed to allow themselves to be controlled and kept in line. In its ruling, the Supreme Court did not speak out about the criteria.

The timeframe does not seem that draconian to me, since we're reverting to the situation that existed in 2006, when consultations took place over a period of one year. It is now time for us to forge ahead. If we start examining this matter all over again and call for additional delays, we will never see the end of it and industry stakeholders will never manage to agree.

Therefore, we oppose this motion.

[*English*]

The Chair: We'll move on now to Mr. McTeague.

Hon. Dan McTeague: I want to assure the committee that the provinces were not consulted and the stakeholders were not consulted. R and D was obviously consulted, but the generics weren't consulted. I don't want to get into a battle of one over the other. I'm pleased to see that we're going to send a letter saying to the minister, "Don't do this again". The damage will already have been done.

I suggest we get on with the vote, Chair. I know you have to get on with this. I think the lines are very clear. Ms. Nash and I have a problem with this. We'll see how this results.

I'm wearing my consumer critic hat. I'm very concerned about this. I'm also concerned that when there were changes in 2006—you'll recall, Mr. Chair—we actually gave data protection back to the industry. We couldn't acknowledge what the Americans, Europeans, and everybody said: that this was far too generous. They received at that time a far more generous opportunity to get a trade-off, which seems to have been lost in time.

I'd like to see consultation, but frankly it's very one-sided. I think that's the position of the department—it hasn't changed. I'm pleased to see that we would like to move on with this, but if we send a letter, I think the minister will look at it and say "Thanks very much. We'll move on."

Thank you, Chair.

•(1235)

The Chair: Thank you.

I don't have any further members on my list, so we will go to the question on the motion.

(Motion negated: nays, 9; yeas, 2) [See *Minutes of Proceedings*]

The Chair: Now we will move to Madame Brunelle's motion. We can do this quickly, Madame Brunelle.

[*Translation*]

Ms. Paule Brunelle: Certainly.

I remind you that Bill C-454 amends the Competition Act. This bill was examined during the last Parliament. The Bloc Québécois supported the proposed legislation, although it found the provisions rather meek. It proposed some amendments, but the bill died on the *Order Paper*.

In our opinion, the Competition Act needs to have more bite. We have a duty to intervene, even if it doesn't resolve the gas pricing problem fully. Since this bill was passed in the House, we could deal with it quickly with a view to disciplining the industry. In our opinion, it is rather unusual for the oil companies to supply each other with gas, rather than compete head-to-head. In order to prove collusion, we need to have the necessary mechanisms. Since we agreed on the principle of the bill, my motion calls for us to take action quickly in an effort to come up with some solutions.

[*English*]

The Chair: Merci, Madame Brunelle.

Mr. Carrie.

Mr. Colin Carrie: We will be voting against this. So you can call the question, if that's all right.

Hon. Dan McTeague: Call the question.

The Chair: Well, I have Ms. Nash on the list.

Ms. Nash.

Ms. Peggy Nash: What I would like to do is learn more about this bill and about the act itself. I guess if we pass this motion, we take away that possibility, because we would be saying that the bill goes immediately back to the House.

The act itself is a complex piece of legislation. I appreciate that in the past there may have been thorough studies of it, but I'd like to learn more about it and see if perhaps there might be some amendments proposed that are in the spirit of the changes being proposed in this bill but that could perhaps strengthen it. So while I support the initiative of the bill, I'm not keen to just rush it through the committee.

The Chair: Thank you.

I don't have any further members on the list, so I'll call the question.

[*Translation*]

Mr. Robert Vincent: I would like to say something before we go to a vote.

Ms. Paule Brunelle: The question has already been called.

Mr. Robert Vincent: The Chair asked if anyone else wanted to speak and I waited before raising my hand. You had already proceeded to call the question. However, I did want to say something.

• (1240)

[*English*]

The Chair: Monsieur Vincent, I will indicate that I have to go to the liaison committee today to argue that the committee should travel. If members want to travel and want the chair to go argue to that committee, they have to let me, the clerk, and the researcher leave at a certain point. So I'll just put that on the floor.

Okay, Monsieur Vincent, you have the floor.

[*Translation*]

Mr. Robert Vincent: It is important for us to want to give the Competition Tribunal and the Competition Act more bite. Gas prices are skyrocketing and our constituents are complaining to us that the situation is utterly ridiculous. Yet, the committee doesn't feel that a discussion of the issue is warranted at this time. I'm appalled, Mr. Chairman, that people are sitting on their hands and doing nothing about this. I've a problem with this, but ultimately, the members are the ones who will be voting.

Nevertheless, we will likely be discussing this matter with our constituents this summer when we are back in our ridings. We'll be able to tell them that in the face of skyrocketing gas prices, the members of the industry committee did nothing.

[*English*]

The Chair: Thank you.

I'll just point out as the chair that if this motion is adopted or not adopted, it does not prevent the committee from looking into gasoline prices as an issue. And further to that, if this motion is not adopted, I presume the committee will want to study this bill in detail, which will include some competitive related aspects of the gasoline industry. The committee is free to review it under this bill or aside from this bill.

[*Translation*]

Mr. Robert Vincent: In what year?

[*English*]

The Chair: We'll vote on the motion.

(Motion negated) [See *Minutes of Proceedings*]

The Chair: I declare the meeting adjourned, and wish me luck.

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