HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

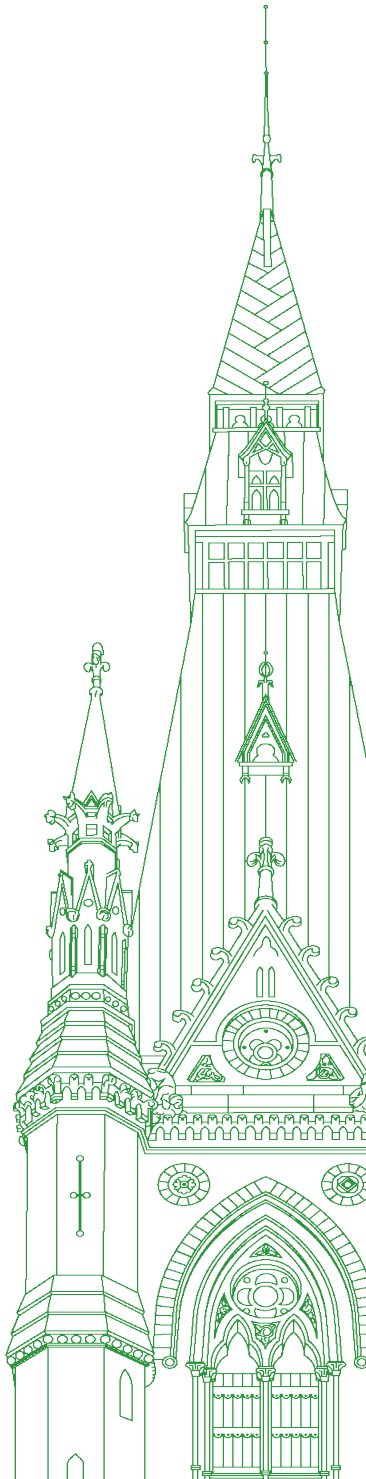
43rd PARLIAMENT, 2nd SESSION

Standing Committee on Industry, Science and Technology

EVIDENCE

NUMBER 015

Thursday, February 4, 2021



Chair: Mrs. Sherry Romanado

Standing Committee on Industry, Science and Technology

Thursday, February 4, 2021

● (1105)

[*English*]

The Chair (Mrs. Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.)): Good morning, everyone. I now call this meeting to order.

Welcome to meeting number 15 of the House of Commons Standing Committee on Industry, Science and Technology. Today's meeting is taking place in a hybrid format, pursuant to the House order of January 25, 2021. The proceedings will be made available via the House of Commons website, and the webcast will always show the person speaking rather than the entirety of the committee.

To ensure an orderly meeting, I'd like to outline a few rules to follow. Members and witnesses may speak in the official language of their choice. Interpretation services are available for this meeting. You have the choice, at the bottom of your screen, of floor, English or French.

Before speaking, please wait until I recognize you by name. If you are on the video conference, please click on your microphone icon to unmute yourself. For those in the room—although I don't believe we have anyone in the room—your microphone will be controlled as normal by the proceedings and verification officer.

I remind you that all comments by members and witnesses should be addressed through the chair. When you are not speaking, we ask that your microphone be on mute. With regard to the speakers list, the committee clerk and I will do our best to maintain the order of speaking for all members.

As is my normal practice, I will hold up this yellow card when you have 30 seconds remaining in your intervention, and I will hold up the red card when your time for questions is up. Please keep an eye on the card and respect the time limit so that everyone has a chance to ask their questions.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on Tuesday, December 1, 2020, the committee is meeting today to continue its study on the domestic manufacturing capacity for COVID-19 vaccine.

I'd like to now welcome our witnesses. With us today we have Anita Anand, Minister of Public Services and Procurement, and François-Philippe Champagne, Minister of Innovation, Science and Industry. We have, from the Department of Public Works and Government Services, Mr. Bill Matthews, deputy minister; from the Department of Industry, Simon Kennedy, deputy minister; and from the National Research Council of Canada, Mitch Davies, president.

I'm getting a note from the clerk that we need to pause for one moment. I think we're having some sound issues in the room. I will suspend for one moment.

● (1100)

_____(Pause)_____

● (1105)

The Chair: We will resume the meeting. Thank you very much.

Each witness will present for up to seven minutes, followed by rounds of questions. We will begin with Minister Anand.

You have the floor for seven minutes.

Hon. Anita Anand (Minister of Public Services and Procurement): Thank you, Madam Chair.

● (1110)

[*Translation*]

Hello, everyone.

[*English*]

How is everyone doing today? It's great to be here with you.

I want to thank you for inviting me to be here with you this morning. Before we start, I would like to take a moment to acknowledge that I'm meeting you from the territory of many first nations, including the Mississaugas of the Credit, the Anishinabek, the Chippewa, the Haudenosaunee and the Wendat peoples.

I would also like to thank everyone who continues to work hard behind the scenes to make these virtual meetings possible. Thanks especially to our interpreters and our translators for playing such an outstanding role in the ability of Canadians to understand and process this information.

Joining me today is my deputy minister, Bill Matthews. Thank you, Bill, for being here.

I want to speak first about the PSPC response to the pandemic. In the face of intense pandemic fatigue and strain, Canadians have pulled together to curb the spread of the virus. I know I speak for all parliamentarians, particularly those of us in this room today, when I say that we wish to thank the doctors, the nurses and the health care providers who are working tirelessly on the front lines. Their work is crucial. That is why, since the start of this pandemic, my department at PSPC has worked non-stop to procure vital PPE and other medical supplies for front-line workers.

In terms of domestic production, we should recognize and thank all Canadian suppliers who have stepped up to fight COVID-19 with us. Many Canadian companies increased their levels of production to provide vast quantities of the items we so urgently need. Protecting our front-line medical professionals was, and continues to be, a top priority.

Early on, for example, we finalized a long-term contract with Medicom out of Montreal to produce tens of millions of N95 respirators and surgical masks annually. We have already taken delivery of more than 18 million made-in-Canada surgical masks and more than 5.7 million made-in-Canada N95s from Medicom.

Throughout the pandemic, more and frequent testing has been critical in order to prevent isolated cases of COVID-19 from becoming renewed outbreaks. LuminUltra, a leading biotech company based in New Brunswick, stepped up to produce large amounts of reagent to support COVID-19 tests right through to March of this year.

While many businesses ramped up existing production capacity, some companies completely retooled their production lines to meet the country's needs. For example, Bauer in Quebec switched from making hockey equipment to making face shields for front-line workers. Toronto Stamp pivoted from making signage to kick-starting a project involving more than a dozen Toronto businesses to manufacture face shields. A Calgary-based chemical processing and manufacturing firm, Fluid Energy, stepped up to produce millions of litres of hand sanitizers to ship across Canada. The list goes on, Madam Chair. For example, Stanfields in New Brunswick has provided us with 100,000 medical gowns per week. Irving Oil, based in New Brunswick, retooled their lines to produce hand sanitizer.

These companies are just a handful of the many innovative and dedicated firms across our country that have stepped up and worked to make sure our front-line health care workers are protected.

I'll move now to vaccine procurement. We know that the quickest way to get to the other side of this pandemic is to follow public health advice alongside a successful vaccine rollout. While our government is investing in the future of domestic vaccine production, my department continues to fight the pandemic today with a strategy that is getting authorized vaccines into the country as soon as possible.

Madam Chair, from the start our government's objective has been to secure safe, effective and necessary vaccines for Canadians as rapidly as possible. Our work was guided by the vaccine task force, the creation of which was a key element for our country's vaccine strategy. In all, our government managed to gain access to nearly 400 million doses of potential vaccines from seven different candidates, resulting in one of the most robust and diverse portfolios of COVID-19 vaccines in the entire world.

Through the establishment of these agreements, we negotiated the quickest delivery options possible. Following the Health Canada approval of Pfizer and Moderna, we have received and distributed more than 1.1 million COVID-19 vaccines to provinces and territories. Between Moderna and Pfizer alone, we remain on track to have enough vaccines to immunize everyone in Canada who wishes to be immunized prior to the end of September.

In addition, through the COVAX initiative, Canada will receive at least 1.9 million doses of the AstraZeneca vaccine, which is close to receiving Health Canada authorization. Should the vaccine be authorized, deliveries could begin arriving before the end of March. We also continue to work closely with the five remaining manufacturers with whom we have bilateral agreements: Sanofi-GSK, Medicago, AstraZeneca, Johnson & Johnson and Novavax.

Our goal is to get more Health Canada-approved vaccines into Canada as quickly as we can.

While vaccines are critically important, so are the supplies needed to administer them. For example, we have secured more than 170 million syringes of varying sizes from a range of suppliers. This includes 64 million of the low dead volume syringes, which are in extremely limited supply around the world. Approximately one million of those specialized syringes are arriving in Canada this week.

In closing, Madam Chair, throughout the pandemic, every single time we have asked Canadian companies for help, they have stepped up and delivered. In addition, we have made sure that we have critical made-in-Canada PPE and medical supplies to meet our country's needs.

Keeping our loved ones safe is our top priority.

Thank you for your time. I'm happy to take your questions.

● (1115)

The Chair: Thank you very much, Minister.

[*Translation*]

I now invite Minister Champagne to take the floor.

Mr. Champagne, you have seven minutes.

Hon. François-Philippe Champagne (Minister of Innovation, Science and Industry): Thank you, Madam Chair.

Good morning, my dear colleagues.

It is an honour for me to speak today as Minister of Innovation, Science and Industry to provide an update on the government's efforts to ensure that Canadians are vaccinated against COVID-19.

First, on behalf of parliamentarians, I'd like to take this opportunity to thank all the officials and public servants who have worked hard over the past months, the past year, to ensure the health and safety of Canadians. I'm thinking in particular of my Deputy Minister Simon Kennedy, but also of Mitch Davies, president of the National Research Council of Canada, and Bill Matthews, Deputy Minister to Minister Anand, who has done a remarkable job.

Canada has secured access to the most promising vaccines being developed in the world. The government has also acted to increase domestic vaccine production capacity to help ensure Canada's long-term pandemic preparedness.

[*English*]

When this pandemic began, Canada had no flexible large-scale biomanufacturing capacity that was suitable for a COVID-19 vaccine. It is important to remember how we got to this position.

For the better part of the 20th century, Canada played a key role in the development and global production of biopharmaceuticals, primarily through the work done at the Connaught Medical Research Laboratories in Toronto. That changed in the 1980s, when the government of the time decided to privatize the Connaught laboratories. Within 10 years, Canada's domestic biomanufacturing ecosystem had eroded. Although companies performed a considerable amount of R and D here in Canada, few products were commercialized for public use.

Then, the previous government cut the funding at Industry Canada that supported life science companies and attracted new investment in Canada.

[*Translation*]

Since then, Canada has lost a number of companies and significant investments. Here are a few examples.

In 2007, AstraZeneca ceased its manufacturing operations in Canada and consolidated them into its facility in Sweden.

In 2010, Johnson & Johnson closed its research centre in Montreal.

In 2011, Teva shut down one of its Canadian manufacturing plants, the one in Montreal.

In 2013, Boehringer Ingelheim closed its research and development centre in Laval, which was focused on hepatitis C and HIV.

In 1973, approximately 19% of Canada's domestic demand for vaccines and therapeutic drugs was met by imports. Today, Canada imports 85% of its vaccines and therapeutic drugs.

[*English*]

Let us look ahead.

From the earliest stages of the pandemic, our government recognized that we needed to increase our domestic capacity to make vaccines and therapeutics in Canada. We invested early and significantly. We took immediate action with a long-term vision.

Let me highlight for you, colleagues, a few of the many investments we have made since March 2020.

[*Translation*]

We must also remember that, in general, it can take two to five years to set up a new pharmaceutical manufacturing facility, if good manufacturing practices are followed. Given the crisis, we will make considerable efforts to speed up the process and reduce lead times.

First, we invested $126 million to build the National Research Council's new biomanufacturing centre near its Royalmount Avenue site in Montreal. Once fully operational later this year, the new facility will be able to produce approximately 2 million doses of vaccines per month nationally.

This week, we signed a memorandum of understanding with Novavax to undertake domestic production of its COVID-19 vaccine at this new biomanufacturing facility in Montreal.

The government has also invested $44 million to upgrade the Royalmount Avenue clinical trials facility. This will allow the NRC to produce materials for clinical trials and doses of vaccine for emergency use.

● (1120)

[*English*]

Let us look at what we did in Saskatchewan. We invested $23 million to help the University of Saskatchewan's Vaccine and Infectious Disease Organization–International Vaccine Centre—or, as we call it, the VIDO-InterVac—to help accelerate the development of its COVID-19 vaccine candidate, and another $12 million to transform its current animal vaccine production facility to meet the standards required for the production of human vaccines.

[*Translation*]

Our government knows that the private sector plays a key role in research and development. Private companies are perfecting vaccines and improving biomanufacturing capacity.

For example, since the early months of the pandemic, the government has allocated $792 million under the strategic innovation fund to develop vaccines and therapeutic products here in Canada and to strengthen biomanufacturing activities. Colleagues from Quebec City will know that the private company called Medicago, which already has over 20 years' experience in vaccine production, has received support of up to $173 million. The funds will enable Medicago to accelerate clinical trials and build a vaccine and antibody production facility in accordance with good manufacturing practices. The government has committed to acquiring up to 76 million doses of Medicago's vaccine candidate if it is shown to be effective.

[*English*]

The strategic innovation fund has also invested up to $56 million in Variation Biotechnologies to develop a COVID-19 vaccine in its Ottawa research facility, and up to $25 million in Precision NanoSystems of Vancouver to support their breakthrough lipid nanoparticle technology.

[*Translation*]

The government recognizes that deploying effective vaccines is the best way to restart the Canadian economy and protect the health of Canadians over the long term.

In the Fall Economic Statement, we committed to exploring ways to strengthen Canada's long-term biomanufacturing and pandemic response capacity. Canada is poised to move forward thanks to its talent and its innovation advantage. This strong commitment comes because we can count on a collective effort.

[*English*]

In conclusion, I would say to all of us, let's seize the moment, let's be ambitious and let's together build a resilient biomanufacturing sector here in Canada.

[*Translation*]

I am now ready to answer your questions.

Thank you.

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

[*English*]

We will now start our rounds of questions.

For the sake of translation, please do not talk over each other, so that the translators can do their work.

The first round goes to MP Cumming.

You have the floor for six minutes.

Mr. James Cumming (Edmonton Centre, CPC): Good morning, Minister Champagne. Welcome to the committee and to your new role. I look forward to working with you.

INDU is going to play a very important role in the economic rebound. You have your hands full. There is lots of work to be done in your portfolio.

I want to start by talking a little about your previous role and getting your input on CanSino and the difficulties that have now come to light with the Chinese government restricting the vaccines coming back into Canada.

When were you aware there were issues with the deal with CanSino?

Hon. François-Philippe Champagne: First of all, Mr. Cumming, thank you for welcoming me. I look forward to working with you. You and I already had a conversation. This is really my stuff.

Let us look back to when this all started. We all know that on March 11 the World Health Organization declared a pandemic. From that time to today, we have about 234 vaccine candidates around the world. On the advice of the vaccine task force—to be more specific to your question—we did look at the candidate that you mentioned, but this was for about three months, something like April to May to August. After that, we discontinued the discussion.

Even before that—and I think that's important for Canadians who are watching—within 12 days of the World Health Organization's declaring a pandemic, we were investing $192 million in biomanufacturing here in Canada. Within a month, we had invested close to $792 million.

My point is just to put that in context for Canadians watching. When there are 234 vaccine candidates in the world, we rely on science, and we rely on the advice of experts. The episode that you're talking about was a very short episode in a very long process. We looked at that for about three months, but then we decided to discontinue the discussion.

● (1125)

Mr. James Cumming: Did you actually provide advice to the NRC that maybe this wouldn't be a good company to do business with? When you saw that the Chinese government was restricting supply, how involved were you? Did you intervene, on behalf of Canada, with the Chinese government?

Hon. François-Philippe Champagne: As I said, Mr. Cumming, if you look at the portfolio of vaccines that we have to date, these discussions were for a very brief moment. After that, we moved on. We selected the pillars, I would say, that will be the pillars of our resilience here in Canada when it comes to biomanufacturing.

You talk about Medicago. You talk about VIDO. You talk about AbCellera in Vancouver and now Novavax. My point is that, following that, we selected, with Minister Anand, seven vaccine candidates around the world. Two of them—the Pfizer and the Moderna—have been approved by Health Canada. That's the rollout that we have in Canada.

The episode you're talking about was just one of the different vaccine candidates that were looked at, at a very early stage, and then we moved on quickly. Today, we have the largest portfolio of vaccines to provide for and, obviously, to protect the health and safety of Canadians.

Mr. James Cumming: Well, let's talk about it quickly. Let's go to Royalmount. There seems to be some confusion over this facility. If you take a comparative to the U.K., which actually built its domestic manufacturing capacity much more quickly than Canada, Royalmount.... The Prime Minister announced that the facility's construction should be complete in July. You were quoted as saying that, no, fit-up's going to take a couple more months. Now we hear that likely, at best, they might get their assembly started and approved by the end of December. Now the discussion is that it may not be into full production until after December—potentially into the new year.

Which date is it? When will we actually see vaccine production in Canada?

Hon. François-Philippe Champagne: Let me be very clear. You have four phases when you build a plant. You have the design phase, the construction phase, the certification phase and the production phase.

I think we should all rejoice, first, as parliamentarians, that Novavax has chosen Canada. When I talked to the CEO.... They could have gone to about seven or eight countries where they already have manufacturing facilities, but they chose Canada, which is good news.

What I did say—and the Prime Minister—is that we expect construction to be completed by the end of the summer. Then you have the period of certification, which could be a couple of months, because, as you know, this is about good manufacturing practices. This is governed by Health Canada in accordance with its processes. Canadians would understand that we want to go fast but that we want to make sure that we respect all the health and safety protocols. Following that, we would go into production.

What I did say is that we would be producing a vaccine before the end of the year in that facility, in Royalmount. We are very pleased, I must say, and we should—you and I and every Canadian—think that having Novavax.... We were lucky because, in a way, the manufacturing process that we have in Royalmount is compatible with the Novavax vaccine. The second thing that made the CEO choose Canada was speed and, obviously, a very stable, predictable, secure supply market. I think that's good news because we need to be prudent and resilient for the future.

Mr. James Cumming: Did you not look at the potential of retrofitting existing facilities early on in this game? Starting from scratch, foundations, putting up a building, building a brand new facility.... Where was the effort for a rapid response? There's lots of industry in Canada.

Hon. François-Philippe Champagne: Totally. Thank you for asking—

The Chair: Unfortunately, MP Cumming, you're out of time, but I will let the minister answer quickly because I know this is an important subject.

Minister, go ahead.

Hon. François-Philippe Champagne: Mr. Cumming, we received about 87 applications under the strategic innovation fund. We looked at all that, and then the task force looked at projects. Their filter is, obviously, to look at what is feasible, the science, the technology and what can be deployed very quickly to provide vaccines to Canadians.

That's how they were looking at it when they were providing advice to this government.

● (1130)

The Chair: Thank you very much, Minister.

We will now move to our next round of questions.

MP Lambropoulos, you have the floor for six minutes.

[*Translation*]

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

Mr. Minister and Madam Minister, thank you for being with us this morning to answer our questions.

My first question is for Minister Champagne, but I invite Minister Anand to add to the answer if she wishes.

Canada's strategy has two components. First, we have the supply strategy and, second, we have the domestic biomanufacturing strategy. To date, all that we have announced to Canadians is that we will fight COVID-19 with two doses of vaccine for every Canadian by September.

How will vaccine production here in Canada help us reach our goals even faster?

Do you believe we could count on Novavax to achieve our objectives before September? Do you feel it's more of a long-term solution, that is, it could help us subsequently, if the first two doses don't work, or if the virus comes back even stronger?

Hon. François-Philippe Champagne: Let me say a few words, then I will let my colleague take over.

First of all, thank you for the question, Ms. Lambropoulos.

I feel that choosing Novavax for Canada is very good news for Canadians. As I often say, we must act immediately and concretely, yet with a long-term vision. What is our long-term vision? It is to ensure the health and safety of Canadians, and that requires resilience and caution.

My role as Minister of Innovation, Science and Industry is to bring home as many links in the supply chain as possible. As noted in the previous questions, we have realized that we are starting from a reduced manufacturing base. This began decades ago. What we are doing now is rebuilding the biomanufacturing base here at home. This will allow us to face the future with much more resilience.

Together with the NRC and its president, Mr. Davies, we will do everything we can to accelerate the construction of the Royalmount Avenue plant. We have four stages: design, construction, certification and production. We are going to do everything we can to make it happen quickly.

That being said, we have other pillars, such as Medicago in Quebec City, AbCellera in Vancouver and VIDO in Saskatchewan.

What I am doing, in cooperation with the government and public servants, is laying the foundations of this resilience, so that Canada is stronger and can face any future health emergency.

Ms. Emmanuella Lambropoulos: Thank you very much for your answer.

As you said, the Royalmount Avenue facility will allow us to produce 2 million doses of vaccine per month. That will be done over the next few months.

[*English*]

What's the best-case scenario for this? When do you think is the earliest we will be able to start producing these vaccines and getting them out to Canadians?

Hon. François-Philippe Champagne: As I said, there are four phases: the design phase, the construction, certification and production. We have said, as the Prime Minister has said, that we expect construction will be completed by the summer.

Then you go into the certification phase, which is an independent process, what we call the good manufacturing practices, which is certification from Health Canada for any biomanufacturing facility in Canada. This period of time could vary, depending on how much time it will be. Then we will move quickly to production.

That's why I said we will be able to produce before the end of the year. Construction will be completed by the end of the summer. There's the period in between of certification that, obviously, we will know when we enter that phase with the independent experts who are going to certify.

I think the good thing for us, and I'm sure you realize, is, again, that Novavax has chosen Canada, thanks to the policy we placed, thanks to the funding we have and our view about science.

I spoke to the CEO. He was excited to come to Canada. They see Canada as the place to be now. We have proven during the pandemic to be a very trusted partner. I can tell you, as a former foreign affairs minister, that the world is looking for stability, predictability, rule of law, traceability and security of supplies. We have demonstrated we're a partner of choice to the world, and that's why we can attract these kinds of investments into Canada.

● (1135)

Ms. Emmanuella Lambropoulos: Thank you very much.

Minister Anand, with regard to procurements, so far we have two vaccine candidates that are going to get us vaccinated by September. Obviously, more of them will be approved by Health Canada in the coming months, hopefully sooner than later.

What do you think is the best-case scenario? When do you think is the earliest that we can get Canadians vaccinated?

Hon. Anita Anand: Thank you for the question. It's nice to be able to interject here.

I use a two-track model to analyze this question. The first is based on approved vaccines alone, those from Pfizer and Moderna, and that is going to lead us to six million doses by the end of Q1, 20 million does by the end of Q2, and 70 million doses by the end of Q3. It's based on that analysis that we are using the end-of-September deadline. But of course we're going to have, hopefully, additional vaccines coming online; that's the purpose of our diversification approach to vaccine procurement. Once those vaccines come online and the vaccines arrive in Canada, those timelines can, hopefully, be moved up.

Thank you.

The Chair: Thank you very much.

[*Translation*]

Mr. Lemire now has the floor for six minutes.

Mr. Sébastien Lemire (Abitibi—Témiscamingue, BQ): Thank you, Madam Chair.

I want to thank the ministers for being here. I believe that today's meeting gives us the opportunity to move forward. Honestly, we don't always get new answers to our questions when ministers appear before the Standing Committee on Industry, Science and Technology. I want to tell them that I appreciate this.

My first question is for Minister Champagne, but Ms. Anand can provide additional comments.

How would Canada and Quebec benefit from having a strategy to deal with the pandemic independently?

Hon. François-Philippe Champagne: I want to start by thanking you for your comment, Mr. Lemire. I'm pleased to be giving you all the information that I have. I think that there's a spirit of collegiality and collaboration, without partisanship. We're saving lives. We must do everything together and hold on to the best ideas.

I think that a strategy of self-reliance has a major benefit. As you have seen, the Government of Quebec welcomed Novavax's decision to set up shop in Canada, especially in Montreal, Quebec. This shows that Montreal has an ecosystem in this area, including significant human capital. I'd like to give credit to our researchers and scientists. I've spoken to the company's president and CEO. If companies like Novavax decide to set up shop in Montreal, the reason is that they believe that they'll have the necessary human capital.

This will enable us to be self-sufficient. Neither you nor I know what the future holds. There are new variants of this virus and we're seeing all kinds of things emerge.

From the beginning, my task has been to take immediate action to try to attract investment here as quickly as possible so that we can be as self-sufficient as possible. On a broader level, I've also had the task of working with Minister Anand and others to find ways to bring as many parts of the supply chain here as possible. That way, in Quebec and in Canada, we'll have all the investments that we can muster to ensure self-sufficiency in preparation for the next health crisis, should one occur.

Mr. Sébastien Lemire: On Tuesday, I asked the Minister of Health a question. She told me that I should ask you the question instead. Why did you buy vaccine doses instead of licences to produce vaccines here in Canada?

Hon. François-Philippe Champagne: I'll let Minister Anand answer you. However, I first want to clarify one thing.

I can give you the example of Novavax and tell you exactly how the discussion went.

You must understand that we have very few manufacturing facilities in Quebec and in Canada that are suitable for the production of this type of vaccine. You'll say that we have GSK in Quebec City. However, GSK already manufactures the flu vaccine, so we don't want to disrupt that production. You'll say that we also have Sanofi, in Toronto. You're right, but Sanofi produces a vaccine against [*Technical difficulty—Editor*].

However, I can tell you what prompted Novavax to move forward. As I said, I had the opportunity to talk to the president and CEO of Novavax. The deciding factor was that the type of vaccine produced by the company is compatible with the production line at the NRC facilities in Montreal.

I'll now let Minister Anand respond.

Hon. Anita Anand: Thank you. Sorry, but I'll respond in English.

● (1140)

[*English*]

I want to be clear that PSPC proactively and repeatedly approached leading vaccine manufacturers with offers to leverage this domestic capacity and possibility here in Canada. We took this issue up with suppliers at every turn at the negotiating table to discern whether they would come to the table with this possibility of domestic biomanufacturing.

The manufacturers reviewed the identified assets here in Canada and concluded that biomanufacturing capacity in this country at the time of contracting, which was last August and September, was too limited to justify the investment of capital and expertise to start manufacturing in Canada. To be clear, PSPC frequently, forcefully, and aggressively brought this issue to the table and raised it with the manufacturers at every turn.

The reality is that standing up new manufacturing of a vaccine requires expertise, and it requires resources from the supplier. Given the scarcity of resources, suppliers emphasized locations that had existing capacity and that would be able to manufacture quickly on a global scale.

That is not to say that the window was closed. For example, we continued discussions with Novavax, as François-Philippe Champagne has indicated, so that there is an option on the table for domestic biomanufacturing. That is a conversation that we continue to have with vaccine suppliers, with ISED and with Minister Champagne to make sure that we are indeed keeping all options open for Canadians. We don't know at this time whether this is going to be a vaccine that is going to have to be administered on a year-to-year basis, and therefore we will continue to pursue the domestic biomanufacturing option.

The clear point is that PSPC raised this at all times.

[*Translation*]

Mr. Sébastien Lemire: When questions are asked in the House of Commons about the national strategy, the answer is often that 80 million doses will be delivered by September.

Isn't investing this much in local production now, somewhat at the last minute, an admission that the earlier Canadian strategy failed?

The Chair: Please give a short answer.

Hon. François-Philippe Champagne: Okay, Madam Chair.

On March 11, the World Health Organization declared a pandemic. Just 12 days later, we invested $192 million in local vaccine production. One month later, we invested $792 million.

Of course, when we start with a core capacity as limited as ours, it takes longer than in England, for example. In the end, we responded quickly by announcing, after 12 days and after one month, considerable investments to increase our capacity.

The Chair: Thank you.

[*English*]

We'll now turn to MP Davies.

You have the floor for six minutes.

Mr. Don Davies (Vancouver Kingsway, NDP): Thank you.

Thank you to the ministers for being with us.

Ms. Anand, I will begin with you.

We know that we are not producing any vaccine doses in Canada currently. We also know that AstraZeneca agreed to allow countries that bargained with it to produce vaccines domestically. Countries like Mexico, Australia, Japan, South Korea, India and others have done so and are producing AstraZeneca vaccines in those countries.

Did Canada seek this right when we were bargaining our agreement with AstraZeneca?

Hon. Anita Anand: I want to mention, first off, that, yes, I raised this issue personally with AstraZeneca last August. That was not an issue they wanted to pursue with Canada at the time, for the reasons I mentioned in my last answer.

Mr. Don Davies: Did they explain why, Minister? Having given that right to so many other countries, did AstraZeneca explain why they would not allow Canada to vaccinate domestically when the national research centre has exactly the facilities and technology to do so?

Hon. Anita Anand: The reasons were multifold, and I believe that you should ask AstraZeneca for a clear explanation of that. For my part, I believe it had to do with the scale of production that would be required in terms of building up Canadian manufacturing.

Perhaps François-Philippe can jump in here if he wishes.

Certainly, I was raising the point that you are raising now, which is that we would like to be able to manufacture here in Canada.

● (1145)

Mr. Don Davies: So you—

Hon. Anita Anand: By the same token, we wanted to make sure that we could ensure that we had the fastest route to the AstraZeneca vaccine, and the APA was indeed the fastest route as a result.

Mr. Don Davies: Okay. Thank you.

Hon. François-Philippe Champagne: I'm happy to add to that if you want, Mr. Davies. Or not—you decide.

Mr. Don Davies: That's okay, Mr. Champagne. I have limited time, so I'll come back to you, but thank you for that.

Hon. François-Philippe Champagne: Okay.

Mr. Don Davies: Ms. Anand, if Canada is not affected by EU export controls on vaccines, can you explain why Canada is not on the EU export control exemptions list?

Hon. Anita Anand: Thank you for the question.

Again, it seems like great minds think alike, as I have raised this question myself. It is indeed something that we are continually working with. I, of course, am the procurement minister, but I'm working very closely with Mary Ng, the trade minister, and Marc Garneau, our foreign affairs minister on this particular issue.

There have been a number of negotiations in order to ensure that our product can leave Europe, and so far, from my part, I have been assured from suppliers that indeed the vaccines will leave Europe. I've been grateful for the work that Minister Ng and Minister Garneau have done in order to make sure that—

Mr. Don Davies: Thank you. If I may ask, have the Europeans given you any explanation for that obviously very confusing list?

Hon. Anita Anand: Me personally, no, but I believe that our counterparts are continually in discussion with the EU on this point.

Mr. Don Davies: Minister Anand, I know that you are a former law contracts professor, so I'm sure you have personally read each of the agreements that we have signed. Is that correct?

Hon. Anita Anand: Yes, it is.

Mr. Don Davies: Can you tell us what are the intervals of vaccine delivery in the Pfizer and Moderna agreements? Does it set out that we are to receive vaccine doses on a weekly, monthly, quarterly or other basis?

Hon. Anita Anand: Thank you for the question.

Our vaccine contracts specify quarterly deliveries only, and the reason for that is—and I need to take you back to the month of August, early August, when we were concluding these contracts—that there was no sense of the timeline for the discovery of a vaccine. Indeed, in speaking with one of our suppliers this week, he said to me, “We didn't know when a vaccine would be produced, and as a result, we could only commit to quarterly deliveries at the time of contracting.”

Mr. Don Davies: Thank you. Fair enough.

Minister Champagne, you have said repeatedly that we expect to have the Novavax production before the end of this year. I must point out that this is not the first time we've heard this.

On August 31, 2020, the Prime Minister's Office issued a press release promising “production of 250,000 doses of vaccine per month” starting last November, with “up to two million doses per month” by the end of last year. Of course, on November 24, he stated that Canada couldn't meet that because we had no domestic production capacity for vaccines.

With respect, Minister Champagne, why should Canadians have any more confidence in this latest assurance, when the last one proved to be completely wrong?

Hon. François-Philippe Champagne: Thank you, Mr. Davies.

For the benefit of Canadians watching, you have two different things going on at Royalmount. You have the $44 million for the clinical trials, and the issue that you mentioned. There was some issue with the certification, but now what we're talking about is a plant that will be able to produce two million vaccines per month.

I would say, Mr. Davies, when you have a partner like Novavax, which every country in the world would like to have, and they chose Canada and they chose Royalmount, I think that should give confidence that we will be able to produce in accordance with the timelines that have been provided.

Mr. Don Davies: Well, when Prime Minister Trudeau said—

The Chair: MP Davies, unfortunately you're out of time.

Mr. Don Davies: Thank you, Madam Chair.

The Chair: We will now go to our next round of questions.

[*Translation*]

Mr. Paul-Hus, you have the floor for five minutes.

Mr. Pierre Paul-Hus (Charlesbourg—Haute-Saint-Charles, CPC): Thank you, Madam Chair.

Good morning, Minister Champagne and Minister Anand.

My first question is for Minister Anand.

Your colleague Minister McKenna was once filmed in a bar saying that, when you repeat the same thing in oral question period, people end up believing it.

Your strategy is to say that Canada has reserved the largest batch of vaccines, with 400 million potential doses from seven companies. These are really just political answers. There are actually agreements in place with only two manufacturers so far: Pfizer and Moderna.

You, and the Prime Minister in particular, are all hammering home that every Canadian who wants the vaccine will receive it by early or late September. We find that hard to believe. How can you say that when there are currently delivery delays?

● (1150)

[*English*]

Hon. Anita Anand: To be clear, the reductions that you refer to were temporary. We had doses leaving Europe from Pfizer on Friday. We have doses leaving from Moderna this week, and Pfizer doses have been cleared for this week's deliveries, moving into next week also. So it was a temporary and unfortunate and very disappointing reduction in doses for Canada, but as we go—

[*Translation*]

Mr. Pierre Paul-Hus: I'm not talking about reductions, Minister Anand. I want to know how you can say that the vaccinations will be completed in September, when there are delivery delays and when vaccines from only two companies have been approved.

According to Agathe Demarais from the Economist Intelligence Unit, the announced date is unrealistic. The issue is that Canada didn't place itself at the top of the priority list when the contracts were being negotiated. She believes that Canada has mismanaged its contracts.

Do you agree with her?

Once again, how can you say that all Canadians will be vaccinated by September?

[*English*]

Hon. Anita Anand: My goal is to eliminate the rhetoric and to provide the facts. The facts are that with our diversified approach to vaccine procurement, what we are seeing is that two vaccine candidates are providing vaccines, and when additional vaccines come online, we will see those vaccines being incorporated into the supply chain for vaccines. Indeed, we are providing information relating to the delivery dates for approved vaccines right now so that the provinces and territories can be prepared for what is to come, which is going to be millions and millions of vaccines, especially in Q2. That is extremely important to note for our planning purposes for each province and territory.

Thank you.

[*Translation*]

Mr. Pierre Paul-Hus: Of course, the provinces need accurate information. Right now, things are a bit of a mess.

According to the current figures, we'll obtain 40 million doses from Moderna and up to 76 million doses from Pfizer. We don't know the exact terms of the contracts with these two companies, but we're relying on your statements. Theoretically, if the contracts are adhered to, the doses received from Moderna and Pfizer would be enough to vaccinate all willing Canadians by September, without the need to involve other companies. Is that right?

Mr. Matthews is nodding.

Hon. Anita Anand: Yes, that's right.

It's very important to remember that two vaccines have been approved so far, and that our country will have the vaccines in the second quarter, from April to June. That's very important.

However, if other vaccine candidates are approved, our country will have more doses before that time.

Mr. Pierre Paul-Hus: Thank you, Minister, but what do you say to the Economist Intelligence Unit, according which it is unrealistic to think we will receive vaccines according to the schedule you are talking about? The EIU says it is impossible for us to receive the vaccines on time and for immunization to be completed by September.

Do you agree or are you still convinced we will receive all of our vaccines on time?

[*English*]

Hon. Anita Anand: Thank you. While I usually do take The Economist at face value, I don't believe that was accurate at all. I do believe that we are on track for the end of September or I wouldn't be saying so repeatedly. I believe that we will have enough vaccines to vaccinate all Canadians by the end of September based on approved vaccines alone. As soon as additional vaccines come online—for example, we have AstraZeneca and J&J in regulatory review—we will have additional vaccines for Canadians.

Once again, this is an example of our diversified procurement approach so that we will have multiple options for vaccines on the table for Canadians. Professor Susan Athey from Stanford University and many others have lauded Canada's vaccine procurement approach as being one that is excellent. Indeed, the CEO of Novavax himself has said that Canada has it right on procurement.

● (1155)

The Chair: Thank you very much, Minister.

We now turn to MP Jaczek.

You have the floor for five minutes.

Ms. Helena Jaczek (Markham—Stouffville, Lib.): Thank you very much, Madam Chair.

Thank you to both ministers for your very clear and I would say frank testimony here today.

My first question is for Minister Anand.

Minister Anand, I want to get a sense of the scale of what your ministry was required to do. If we could turn to the beginning of the pandemic, when procurement of personal protective equipment was probably on everyone's mind, could you go through...? You gave us a few numbers, but give us a sense of the scale of what was required—how many different product lines—and also the type of investment that was required to be made in those early days.

Hon. Anita Anand: Thank you for the question.

At the outset, we, at PSPC, were faced with a challenge to procure a number of items of PPE on behalf of the Public Health Agency of Canada in March. This was required on an urgent basis when the country needed these items. We moved very quickly to implement long-term contracts so that we could prepare for any eventuality in this pandemic, including a second phase, which we saw.

What we did was to procure over 2.7 billion items of PPE, and we were able to provide that equipment to the Public Health Agency for distribution to front-line health care workers across this country. Over 1.4 billion items of that PPE have been delivered: face shields, gloves, gowns, surgical masks, N95 masks. That was a massive procurement effort. I don't want that to go unnoticed, because our public servants worked incredibly hard to provide for Canadians.

At the same time, there were additional procurements that were needed, for example rapid test kits. We moved very quickly to purchase over 40 million rapid test kits for Canadians and distribute those to provinces and territories. Nearly 15.5 million tests have been delivered to date, and that number is increasing.

In addition to that, we then moved to procure vaccines, under seven APAs, and put those contracts in place in very rapid succession after we received the advice of the vaccine task force and the Public Health Agency of Canada. We put those contracts in place, and now we are seeing deliveries into this country, which will rapidly increase as we go through the next weeks and months.

That strategy was one of aggressive action and forceful conduct at the bargaining table, and I am very honoured to be on the team that brought that to the fore.

By the same token, we are also in charge of ensuring that the supplies and the logistics systems are in place. So, count this: the PPE, rapid test kits, the vaccine procurement contracts, and a logistics system that works end to end so that we can support the delivery of supplies across this country, including vaccine supplies.

For example, we purchased freezers—a total of 446 deep-freeze and ultra deep-freeze—gauze, bandages, alcohol swabs, sharps containers, fill and finish machines, all to be utilized in the vaccine procurement and distribution effort. Those supplies are being delivered to the provinces every day, because we are in this together.

We need to be collaborative, to work co-operatively, and that's exactly what I talk to my team about every day. We are working for Canadians to make sure that we are supported as a country through this pandemic.

● (1200)

Ms. Helena Jaczek: Thank you very much, Minister Anand.

You didn't mention one particular product: ventilators. I believe there was an excellent response from domestic manufacturers in that area as well.

Do you recall any details of those contracts?

Hon. Anita Anand: I'll start, and I will ask François-Philippe if he would like to join in.

I believe his department led a competition for the selection of ventilator manufacturers, and once that selection occurred and the ventilator suppliers were chosen, then our department supported those choices and executed contracts. In total, we ordered over 40,000 ventilators, and we have received over 22,000 of those ventilators already. That was an incredible made-in-Canada effort to ensure that we have domestic supply of PPE, including ventilators. Of all our contracts for domestic manufacturing and PPE, we now have over 40% with domestic companies.

This is an incredible and important effort.

The Chair: Thank you, Minister.

My apologies. I hate cutting you off, because these are excellent questions and excellent answers, but I want to make sure everyone gets their turn.

[*Translation*]

I now give the floor to Mr. Lemire for two and a half minutes.

Mr. Sébastien Lemire: Thank you, Madam Chair.

My question is about Bill C-13, COVID-19 Emergency Response Act, passed in March 2020.

Under one of that bill's provisions, it would have been possible, until September 30, 2020, to override drug patents in case of health emergency and to import drugs that are not authorized for sale in Canada.

However, that provision was removed on September 30, 2020, and I would like to know why.

[*English*]

Hon. Anita Anand: Is that question for me or for François-Philippe?

[*Translation*]

Hon. François-Philippe Champagne: I think that Minister Anand knows more about this than I do. However, I can give you a more general answer, Mr. Lemire.

Since our call to action, 6,800 companies in Canada have wanted to participate in the collective effort. What we have done is almost comparable to Project Apollo.

I want to come back to questions that were raised earlier, especially by Mr. Davies. People are wondering why some manufacturers decided to do things differently if there was a license. That's because Canada did not have the manufacturing base to produce vaccines in such large quantities. The largest factory we have is Sanofi's facility in Toronto. However, Sanofi already produces vaccines for other diseases. So that is why the contracts we have in Canada may be different.

If we take the example of AstraZeneca and India, it's important to understand that they had already established a partnership. That factory in India produces 1 billion vaccines annually. You understand that our situation is in no way comparable to India's, even if we take into account facilities we are currently building. We need to rebuild our entire manufacturing base. That explains in large part the decision made in terms of contracts.

The same goes for England. Our manufacturing base is even smaller than England's.

In these circumstances, the best solution was clearly to import vaccines, as Minister Anand decided to do. The second action we took, 12 days after the pandemic was declared, was to quickly invest considerable amounts of money to improve our manufacturing capacity in order to ensure our resilience.

● (1205)

Mr. Sébastien Lemire: I have a supplementary question.

The pharmaceutical industry was a jewel in Quebec in the late 1990s. However, major pharmaceutical companies and their science experts left the country in the 2000s, primarily because the risk-sharing investment program Technology Partnerships Canada was put on hold under Paul Martin's Liberal government and abolished under Stephen Harper's Conservative government.

Some 15 years later, we are seeing the failure in terms of our ability to produce vaccines and personal protective equipment or to find pharmaceutical solutions.

Will you reinstate that program to enable major pharmaceutical companies to return to Canada?

Hon. François-Philippe Champagne: I will try to answer briefly, as I see the chair signalling to me.

Like I said in my presentation, since the 1980s, we have lost a lot of elements in this industry.

However, allow me to reassure you, Mr. Lemire. Barely a month into the pandemic, we had already invested $792 million. I could give you the long list of businesses—many of them in Quebec—that wanted to contribute in a number of areas, be it in terms therapies or vaccines, for instance.

The Chair: Thank you very much.

[*English*]

Our next round of questions goes to MP Davies.

You have the floor for two and a half minutes.

Mr. Don Davies: Thank you.

Now, Prime Minister Trudeau and both ministers today, I think, have repeatedly emphasized that Canada will receive enough vaccine doses from Pfizer and Moderna alone to vaccinate every single Canadian by September. That's the claim. Yesterday it was revealed that Canada is the only G7 country to request vaccines from the COVAX program, which is a global initiative meant primarily to help low- and middle-income countries get access to vaccines. Specifically, Canada has requested approximately two million doses from AstraZeneca, of course pending regulatory approval. That's expected to arrive at the end of June.

In this regard, we are listed along with such countries as Rwanda, Sudan and Afghanistan, which have yet to receive a single dose of vaccine. We've also made this request of COVAX at a time when the entire continent of Africa has administered about 230,000 doses and Canada has received about a million doses.

Minister Champagne, does it seem morally defensible to you that Canada is taking vaccines from poor countries—because we are in a globally competitive environment, as Minister Anand said—some of which have received no doses at all, while claiming that we have enough doses to vaccinate our entire population without even touching the COVAX supplies?

Hon. François-Philippe Champagne: Mr. Davies, with respect, I may let Minister Anand respond. She was more involved than I was in vaccine procurement.

Hon. Anita Anand: The intention behind COVAX, in order to bring countries together to form this multilateral pooled procurement mechanism, was to ask countries to supply certain funding for their own procurements and then to also ask them to provide funding for the developing world.

Canada stepped up and provided $220 million for the pool procurement mechanism, from which it could draw as one of those contributing countries to bring doses to Canada. We also stepped up to provide $220 million for doses for the developing world.

The way in which this procurement approach functions is to allow developed countries to procure doses to use domestically and also to ask them to provide funding for the donation of doses to the developing world.

Canada is one of the largest contributors to the COVAX facility, because of our commitment to the developing world. Indeed, our Minister of International Development is taking a leading position in that alliance, because of our belief that until everyone is safe, no one is safe.

The Chair: Thank you so much.

Our next round of questions goes to MP Généreux.

[*Translation*]

You have the floor for five minutes.

Mr. Bernard Généreux (Montmagny—L'Islet—Kamouraska—Rivière-du-Loup, CPC): Thank you, Madam Chair.

Mr. Champagne, I welcome you in this new role.

I am new to this committee, so I will be watching you, Ms. Anand.

You just compared vaccine procurement to Project Apollo. I am instead tempted to say, "Houston, we have a problem." Something isn't right.

Ms. Anand, my question is for you.

Today, *The Economist* is reporting that Canada is dreaming in technicolour and that the vaccine delivery we want will not materialize. We have not received any vaccines over the past three weeks.

According to you, your portfolio is amazing, and you have done extraordinary things.

However, if we take the global vaccine production capacity into account, is it really realistic to think that we will have vaccinated Canada's entire population of 38 million people by September?

● (1210)

[*English*]

Hon. Anita Anand: As I said, I don't believe The Economist is accurate on this point, with the knowledge we have here in Canada relating to the deliveries and procurements I have mentioned here today.

In particular, we are going to see a very rapid ramp-up over the next weeks and months from approved vaccine suppliers alone. As a result, all Canadians who wish to have access will have access prior to the end of September. That is based just on approved vaccines alone, but we know we have others in rolling review.

This is the benefit of having a diversified portfolio. We—

[*Translation*]

Mr. Bernard Généreux: I apologize, Minister, but all this makes me think of a situation where a person has reserved a car with seven different dealerships, five of which are unable to deliver it before 2022, 2023, 2024 or 2025. How do you expect the person to drive a car they won't have for another two, three or four years?

That is the reality. The vaccines have neither been approved nor are they in production. What's more, as Mr. Champagne said earlier, steps need to be followed before vaccine production can begin. Facts show us that we will not have all the vaccines by September.

Mr. Champagne, you said earlier that four steps must be followed before a business can manufacture vaccines. I understand those steps, as I am in business myself. However, the reality is that England has built....

My dog is starting to bark. I'm sorry. This is the reality of working from home.

Hon. François-Philippe Champagne: You see that your dog does not agree with you, Mr. Généreux. He is letting you know by barking.

Mr. Bernard Généreux: He has made me lose my train of thought.

What I was trying to say is that England has successfully modernized factories, so that it can produce vaccines very quickly, which is something we have not been able to do in Canada. In China, hospitals are being built in two or three weeks.

Hon. François-Philippe Champagne: I don't know whether you want me to answer, Mr. Généreux. You muted yourself, and we understand why. I understand the meaning of your question, so I will answer it quickly.

England's case is often brought up, Mr. Généreux, and I find it interesting. However, as I told you, the British manufacturing base was vastly different from Canada's. England had more capacity, and that is what made production intensification possible.

In Canada, only two factories have a large manufacturing capacity: Stanofi's facility, in Toronto, and GSK's, in Quebec City. You are familiar with GSK, which has facilities in Sainte-Foy. However, GSK is already producing a flu vaccine.

So our manufacturing base was smaller than England's. That is why the English were able to quickly turn to that solution.

Here, we quickly invested considerable amounts of money. We must also make sure to do things prudently and with resilience. By choosing to set up in Canada, Novavax was essentially giving us its seal of approval. That's pretty important.

Mr. Bernard Généreux: We agree with you. That's excellent news.

In reality, we should have pursued this option much more quickly. Vaccines would eventually be approved. We could have signed contracts.

According to you, we are in the best country in the world. It's as if we were dreaming in technicolour. However, the reality is different from what you are saying.

What will you tell us in September, when not all Canadians have been vaccinated? Can you answer that now?

The reality is that what you are saying will not happen. We already know it.

The Chair: Mr. Généreux, since you were interrupted by your dog earlier, I will give you a bit more time, so that the minister can answer you.

[*English*]

Minister, please go ahead. Feel free to answer.

Hon. Anita Anand: I would just like to say that I think the rhetoric needs to come down a little bit.

What we are saying here is that doses from the approved manufacturers are going to be coming into Canada in the next weeks and months in full force. We know this because these vaccine companies began producing vaccines prior to approval. They have evaluated their own production lines to ascertain that.... The fact that they are telling us that vaccines are available for delivery in Q2 is based on their own estimations of their production facilities.

That's how we can be confident that 20 million vaccines of Pfizer and Moderna are going to come in Q2, and that 70 million in total will come prior to the end of September. That's what we need to continue to say. Undermining that point of view by saying that it's impossible to occur is simply untrue, based on what we're being told from the vaccine manufacturers themselves.

That's what I'm relaying to you. It's not pie in the sky. It's not unicorns. It is based on what the vaccine suppliers are telling us as Canadians.

Thank you.

● (1215)

The Chair: Thank you very much, Minister Anand.

We'll now turn the floor over to MP Erskine-Smith.

You have five minutes.

Mr. Nathaniel Erskine-Smith (Beaches—East York, Lib.): Thanks very much, Madam Chair.

I want to pick up on that need for clarity as it relates to the vaccine rollout schedule. I think it's important that we don't talk about doses, but we talk about the vaccinations that can occur for individuals. I think that is clearer for Canadians and certainly for my constituents.

For the two companies alone that have been approved—Pfizer and Moderna—three million people will be able to be vaccinated on the delivery schedule by the end of Q1, 13 million people by Q2, and 36 million people by Q3.

Is that correct, Minister Anand?

Hon. Anita Anand: It will be three million by the end of Q1, 13 million by the end of Q2, and 36 million by the end of Q3 with approved vaccine candidates alone.

Mr. Nathaniel Erskine-Smith: As it relates to the additional agreements that are in place.... Obviously, AstraZeneca has been approved in a number of other jurisdictions, so one would think Health Canada could approve it in short order. If AstraZeneca is approved, how many people might be vaccinated based on that delivery schedule by Q2?

Hon. Anita Anand: We are expecting doses of AstraZeneca in Q2, and once that regulatory approval has been obtained, we will be able to ascertain the delivery schedule with the supplier. I will ask my deputy minister here if he would like to step in and clarify anything else, but I will say that there are variables that we need to take into account.

In addition to these AstraZeneca doses, under our bilateral agreement we are scouring the globe for additional doses of AstraZeneca that we can bring into the country as soon as possible. That is why we opted into the COVAX doses, for AstraZeneca.

The other G7 countries already have doses of AstraZeneca. That was not something that they chose to do. We are also going to work with our supplier itself, to move up those doses as soon as possible. Those variables are really important to take into account.

I'll hand it over to Bill Matthews.

Mr. Nathaniel Erskine-Smith: I appreciate that. I have just a small amount of time.

I'll move to Mr. Kennedy.

The decline of the domestic manufacturing capacity for vaccines is well documented, going back to the privatization of Connaught Labs in the Mulroney years. You are an ex officio member of the vaccine task force. We have heard John Bell from Oxford in the media here in Canada say that the U.K. went from near-zero production capacity to full-fledged production capacity.

What were the conversations at the task force? If it was determined that it was not feasible to do the same thing here in Canada, what was the nature of those conversations and the advice of the task force at the time?

Mr. Simon Kennedy (Deputy Minister, Innovation, Science and Economic Development Canada, Department of Industry): Perhaps I can try to give a quick answer.

I can't really get into the internal deliberations of the task force. I can say that we did meet and discuss with the U.K. vaccine task force. We were quite interested in learning the lessons from other countries. On this issue of the U.K. experience and of domestic biomanufacturing, I said that my ministry did an extensive survey of the biomanufacturing capabilities in Canada. We did that with the support of expert consultants. This was very early last spring, in the early days of the pandemic.

To take the U.K. as an example, the U.K. had a number of very large contract manufacturing operators that were capable of quickly shifting to produce COVID vaccines. The U.K. had also started years before the pandemic, in fact in 2017, to launch a significant rebuilding strategy. For one of the big facilities they are building, which won't be ready until later this year, they launched the construction in 2019, a year before the pandemic hit.

As Minister Champagne said, the U.K. certainly pivoted and was able to do manufacturing domestically, but they were starting from a much higher base, including having facilities—

● (1220)

Mr. Nathaniel Erskine-Smith: Mr. Kennedy, I appreciate that, but the last point to be made, I suppose, is from constituents, when they say they want to make sure that something like this never happens again, where we face a situation like this and we don't have the necessary national security fundamental to our domestic manufacturing capacity for vaccines.

When it comes to Medicago, Precision NanoSystems, Variation Biotechnologies and the Biologics Manufacturing Centre, can you walk us through, briefly at least, the investments that we are making to make sure this never happens again?

The Chair: Be very quick, because we're out of time.

Mr. Simon Kennedy: Members will know that not all vaccines are the same. There are different platforms. There's messenger RNA. There's viral vector. There are proteins.

The advice we got, much as was the case with these international purchases, was that to have domestic security of supply, we really need to be looking at investments across a portfolio of different kinds of manufacturing technology. In the investments that have been made—I can speak to this later if there's interest—we have been trying to cover those various kinds of technologies and platforms so that we're not dependent on just one thing.

I'll stop there.

The Chair: Thank you very much.

That finishes our second round. We'll start our third round.

The next round goes to MP Cumming.

You have the floor for five minutes.

Mr. James Cumming: Thank you.

Minister Champagne, a lot of different companies have come to light, including Precision NanoSystems, Providence, and Entos. Several companies have talked about their capacity and ability to provide vaccines. Recently we've seen that they've received funding. Why was that not earlier? Why was that not back in May? Why is there such a lag to actually getting behind some of these entities?

Hon. François-Philippe Champagne: First of all, let me just say that we're willing and very happy to work with everyone who has raised their hand. If you look at Entos, which you mentioned, in Edmonton, on May 1 they concluded an IRAP agreement of $100,000, and on May 25 they received about $4.2 million. In September, they received another $5 million. If you look at a small company like that, which received almost $10 million, my message to you, but also to all of them and other companies.... We talked about Providence, which also received $10 million. This is good. I want more of these companies across Canada to be helping us to find the next vaccine, and we will be with them every step of the way.

But for people at home to understand what we've been doing.... Some of them, as you know, Mr. Cumming, are in clinical trials, so we provide them funding to accelerate the clinical trials and we will be with them with the SIF when it comes to biomanufacturing, if they get there, because as Mr. Kennedy said based on the question before, we have a very wide portfolio.

Mr. James Cumming: I understand—

Hon. François-Philippe Champagne: I could go through the various investments we made to make sure we would be well positioned.

Sorry, I interrupted you.

Mr. James Cumming: I understand, but in a $400-billion package that's been dealing with this, those are relatively small dollars in the overall scope of things.

I was taken by Mr. Kennedy's...and maybe Mr. Champagne can speak to this. The U.K. recognized in 2017 they had to get on with providing some of this domestic manufacturing. The government has been in place for five years now. What on earth was your predecessor doing? There doesn't seem to be.... Now we're reacting, but even on a small scale, we haven't proceeded with any kind of domestic manufacturing.

I know you're new to it, and I appreciate the work you're doing today, but where have we been?

Hon. François-Philippe Champagne: First, to your other points, Mr. Cumming, I just want to clarify that, for example, the investments that were made to IRAP are through the National Research Council. The amounts that you were referring to have been determined with experts and leading scientists in Canada. Those are scientific decisions. They're not political decisions as to the level of funding. I want to be clear that these decisions were taken by experts who said, “This is the type of funding you need for that type of clinical trial.”

I want to be clear with you and all members. If you have companies that want to help, please send them to me and we'll see and we'll provide them to the task force that is giving the expert advice.

When it comes to the pandemic, again, we just have to go back a year. The pandemic was declared on March 11, and 12 days afterwards, we were already there to invest significantly—as I said, $192 million. Within a month, we had put close to one billion dollars to scale. I think what you're saying, Mr. Cumming, is that we have these different companies in Canada, and I have a full list of vaccine companies across Canada. What we've been trying to do to react quickly, with the deputy minister and the whole team, was to scale very quickly to make sure that, based on advice, we would select the best one that could be safe and effective and could be available quickly to Canadians.

I think if you look at the record, we acted as quickly as possible to make sure that.... The investments like Novavax—you would agree with me—are the type of thing I want to see. That's the type of thing I'm looking for, to make sure we accelerate and expand.

To Mr. Erskine-Smith's point before, we will be resilient whatever comes next. Whatever that may be, we'll be resilient.

● (1225)

Mr. James Cumming: Okay. I want to be able to carry on. I still believe it's been five years late to the game.

Minister Anand, I want to be able to get to you. It's clear that in the vaccines the numbers are large—13 million, 36 million. Do you not see why it would be important to lay that out in a detailed plan so the provinces can properly react to those kinds of volumes? Going from six million to 36 million is a hell of an effort that they're going to have to make. They need to see a plan.

The Chair: Unfortunately, MP Cumming, you're way over time. I'm going to have to stop you there, because we want to make sure everyone has a chance to ask their questions.

I'm going to turn it over to MP Ehsassi for five minutes.

Mr. Ali Ehsassi (Willowdale, Lib.): Thank you very much, Madam Chair.

Thank you to the ministers for being with us today. A lot of the information out there has been misleading, but you have provided us detailed responses.

Minister Champagne, the previous member, my Conservative friend, was talking about Canada's capacity. In your assessment, the hollowing out of vaccine manufacturing that occurred in Canada between 2007, beginning with AstraZeneca, all the way to 2014, when four vaccine manufacturing companies withdrew from our country, did that undermine our capacity to develop vaccines in this country?

Hon. François-Philippe Champagne: First of all, let me thank you for your work as parliamentary secretary in helping, like all members have, to make sure we have the best strategy and policies to protect Canadians. If you would allow me, I will go back to Mr. Cumming's previous question, when he was talking about the level of preparedness.

Mr. Cumming, I apologize I didn't have enough time to be fulsome in my answer, but I want to say that we reopened the strategic innovation fund to biomanufacturing when we formed the government.

To your point, I think what all of us need to look at now is that we are building the pillars of our future resilience, so we invested in Medicago in Quebec City, and it is a significant investment, close to $173 million. We then made a significant investment in VIDO in Saskatchewan, and one in AbCellera. This week we were able to attract—and I want to emphasize for members—Novavax to Canada, because, let's be clear, every country would like to have Novavax manufacturing in their country. They chose Canada, and there's a reason why.

I also want to be fulsome with Mr. Cumming, because I did speak to the CEO of the company. Our policies, when it comes to science, investments, and ease of doing business, were key in his decision. You don't need to take it from me. You can listen to the interviews he gave in Canada.

What we will be doing together—and we're trying to accelerate this as quickly as possible—is investing in small and medium-size businesses as well. Mr. Ehsassi, and all of us members, have SMEs that want to help in our regions, in our provinces and in our towns, and I greatly welcome that. That's why we supported them with the National Research Council. We supported those that were at a stage that was, I would say, more advanced. We couldn't, for example, in terms of biomanufacturing, give them the resources to do that.

Deputy Minister Kennedy explained we did that because there are also different types of vaccines. When we look at our vaccination procurement, we see there are about 234 vaccine candidates in the world. We selected seven of the most promising based on the advice of the task force. Two of them have been approved in Canada and in most G7 countries, and deliveries are now in Canada.

When we look at the big picture, we see it in terms of both procurement and domestic scale-up of biomanufacturing. We did what we needed to do first to ensure that we were protecting the health and safety of Canadians, and at the same time, that we would be very resilient.

We're not going to stop there. I want to reassure you, Mr. Ehsassi, and other members of the committee, I'm talking to different companies. We are going to make our country resilient. We will be well prepared for whatever may come next. We will try to accelerate all these manufacturing projects to be produced safely, because I think Canadians want speed, but they also want something safe. We will do this as safely and as quickly as possible to protect the health and safety of Canadians.

● (1230)

Mr. Ali Ehsassi: Thank you very much for that, Minister.

Canadians have heard by now that the vaccine task force has done a tremendous job. They had to choose among 234 vaccine candidates, and they did a magnificent job.

One of the committees we haven't heard a lot about is the Joint Biomanufacturing Subcommittee. Would you be kind enough to explain to us the tremendous work that subcommittee has been undertaking for many months?

Hon. François-Philippe Champagne: I think we should all be grateful, as parliamentarians on behalf of Canadians. Just as you said, they looked at many proposals. They are experts. I have been told some stories of the members of that task force. Some are doctors who were on the front line, and at the same time they're taking their phones and trying to provide advice.

I want to emphasize that those decisions are scientific decisions. They are not political decisions as to where we are going to invest. The members of the committee made the screening. They decided which ones would be safe, effective and available quickly to protect Canadians. Those were the parameters under which they operated.

Now the chair is smiling and waving at me, which means I will have to stop here.

The Chair: Thank you very much.

We will go next to Mr. Lemire.

[*Translation*]

You have the floor for two and a half minutes.

Mr. Sébastien Lemire: Thank you, Madam Chair.

Minister Champagne, we feel that you are making your mark as Minister of Innovation, Science and Industry. A number of your answers indicate that you are in favour of Canadian industry autonomy and much stronger economic sovereignty.

However, the government has not specified what measures it will take to increase Canada's overall science capacity and guarantee our research. This is directly within your purview. I am talking about both basic research and applied research. Canadian scientists must have access to funding to help them use their talents.

What will the government do to both invest in the next generation of scientists and provide ongoing support to them, so that they can meet the challenges of the next crisis?

Hon. François-Philippe Champagne: Thank you, Mr. Lemire.

I'm glad you raised the issue of science because, before the biomanufacturing stage, there is science. Science gets us there.

I think we have shown the importance of science. As I often say, the pandemic was declared on March 11, and 12 days later, on March 23, we were already investing $275 million in what we called Canada's plan to mobilize science to fight COVID-19. The goal of those investments was to ensure to give us the necessary means. That was on top of what the National Research Council of Canada was already doing.

We will continue to invest in science. Everyone must learn lessons from this pandemic. A century has passed since something like this occurred. We have never experienced such a pandemic. Of course, we must learn from it.

That said, we reacted quickly. You can definitely count on me, as Minister of Innovation, Science and Industry, to work with you and your colleagues, listen to the ideas that will be proposed and see how we can better support basic science and applied science. Those people enable us to make progress.

I was looking at various vaccine candidates. There is a vaccine from Medicago, but there are also vaccines from smaller companies, such as Variation Biotechnologies, Precision NanoSystems, IMV, Entos Pharmaceuticals and Providence Therapeutics. There is also a vaccine from Biodextris, in Laval, and from Glycovax Pharma, in Montreal. We have a lot of them. I am pleased, as this will help create quality jobs and keep our researchers in the country. Moreover, our universities will be even more attractive if our manufacturing base provides students with good opportunities.

● (1235)

Mr. Sébastien Lemire: I have a question you can answer with a yes or a no, out of respect for the time Madam Chair has given me.

Are you committing to invest more in research than your government has done over the past five years?

Hon. François-Philippe Champagne: Our government has made record investments in science, and we will certainly continue to support our researchers and our scientists because they are the reason our country is in a good position today.

Mr. Sébastien Lemire: Thank you.

Hon. François-Philippe Champagne: Thank you.

The Chair: Thank you very much.

[*English*]

We'll now go to MP Davies.

You have the floor for two and a half minutes.

Mr. Don Davies: Thank you.

Minister Anand, we know that the EU, the United States and Brazil have released contracts that they've signed with vaccine manufacturers, although some of it's redacted. I'd like to know who made the decision in the Canadian government not to release a single word of any of our contracts, and why.

Hon. Anita Anand: I want to start by saying that every country is different—given their domestic capacity, for example—and therefore the negotiations with countries and the resulting contracts are not identical.

In terms of Canada's bilateral contracts with vaccine producers, there are a number of clauses that we as the Government of Canada, as one of two contracting parties, need to respect as a matter of law. More importantly, perhaps, we don't want to put our vaccine procurements at risk. We all need vaccines. If we were to disclose these contracts, we would risk receiving those vaccines, because we would be in a potential breach of contract.

Mr. Don Davies: Minister, I'm a lawyer myself. I've read my share of contracts. Are you saying that the confidentiality clauses in our contracts prohibit the release and disclosure of the entirety of the contracts, or just parts of them?

Hon. Anita Anand: The confidentiality clauses apply to the contracts as a whole. I have gone back to the vaccine manufacturers to discuss this issue with them. They are, as one of the contracting parties, very concerned to ensure that Canada respects its contractual obligations.

Mr. Don Davies: Thank you.

Minister Champagne, you mentioned that Canada has supported vaccine production to the tune of billions of dollars. Have you obtained contractual conditions attached to that public money, that vaccine production must be in Canada?

Hon. François-Philippe Champagne: If you will allow me, Mr. Davies, because I have not been privy to the specific contracts, as I'm sure you would understand, I can ask my deputy minister to provide you the details with respect to the terms of the contracts.

Mr. Don Davies: Thank you, Minister.

The Chair: Thank you very much.

This is the time the ministers gave us, and I know that they gave us a little extra time so that we could get through the four parties for the third round. I want to thank them for being with us today and for answering the questions that many of us have had.

With that, I will allow the ministers to leave. We will continue our rounds with the deputy ministers and other representatives from the departments.

Ministers, again, thank you for your time. Thank your teams for us, on our behalf.

Hon. François-Philippe Champagne: Thank you, Madam Chair, for welcoming us and for allowing us to provide details to the committee.

[*Translation*]

Thank you, everyone. Have a good day.

Hon. Anita Anand: Thank you very much, everyone. Goodbye.

[*English*]

The Chair: MP Dreeshen, you have the floor for five minutes.

Mr. Earl Dreeshen (Red Deer—Mountain View, CPC): Thank you very much, Madam Chair. I may want to share my time with Mr. Nader as well.

I have just a couple of comments.

We have just heard from the minister that as far as contracts are concerned, one of the two contracting parties could decide whether or not they want to have some of the details held in confidence, but are not some of the contracts that are being exposed by other countries with the same companies? If they are, then is it not Canada that is holding it up?

Also, of course, for these negotiations, if they are not identical, it would be interesting to know why it is that we've been suffering. Is this perhaps the reason why we don't want to show how difficult it is?

● (1240)

Mr. Bill Matthews (Deputy Minister, Department of Public Works and Government Services): Thank you, Madam Chair, for the question.

I think to maybe further elaborate on the comments Minister Anand made, it is a contract between two parties, and the differences you will have to keep in mind with other countries are that where there is manufacturing occurring in other countries, which the governments may or may not have been a party to in terms of financial investment or other pieces, that then draws a different discussion around potential disclosure.

We're certainly not in a world where we are interested in potentially being in breach of contract, especially given how important the product is, and it is a contract between two parties, as was already said. That's I think all I can offer on that front.

Mr. Earl Dreeshen: Okay.

To go to another point, we keep hearing about how we will have procurement possibilities for hundreds of millions of doses. Of course, we don't need hundreds of millions of doses, so what actually happens to the value of those doses that we have procured?

I mean, does this work into the price that you might have to pay if you're only getting maybe at the most 100 million doses but you're telling all of these suppliers that you could get as many as 400 million from them? If that is the case, for the difference between 100 million and 400 million, is this to pay back those that we're going to be taking from the COVAX fund?

Mr. Bill Matthews: Thank you, Madam Chair. I have a couple of comments.

When the contracts were put in place with the seven different manufacturers, again, this was during last summer, at a time when nobody was certain which vaccines would actually make it across the line. We have two that have made it through regulatory approval and, hopefully, more to come soon. That was the reason, and companies were taking risks to basically do research, clinical trials and start production at the same time, so there was a need to sort of pony up if you wanted your foot in the door early.

In terms of what happens if they all come to fruition and Canada gets more doses than we need, well, there's an ability to donate. As has already been mentioned, no one is really sure what the durability of these vaccines is. Is this an annual thing so that they could be folded into future years' vaccines as well? There's flexibility there, and I think, frankly, that it's just too early to say what will happen, given the various stages of regulatory approval.

Mr. Earl Dreeshen: What is the capacity of Canada to be able to supply doses to those people who need them? I'm asking this because you say that there could be as many as two million a week and so on. I know that there are a lot of unique things that people are talking about as to the ways to get vaccines into people's arms. Does anybody know what the capacity is of the Canadian medical system to actually be able to get these doses into Canadians?

Mr. Simon Kennedy: Madam Chair, I'll be pretty brief here because we're drifting into Public Health Agency territory, but a key point here is that provinces and territories have a key role in the actual final mile to get vaccines into people's arms.

I think the two vaccines that are in play right now, Moderna and Pfizer, as I think all are aware, have fairly specialized shipping and storage requirements in terms of cold temperatures. Some of the other vaccine candidates do not have those rather rigid requirements, so it does open up a different list of possibilities in terms of how vaccines might be administered, but those are discussions that the Public Health Agency is having on an ongoing basis with provinces.

Mr. Earl Dreeshen: Certainly. My last question is going to be this. We seem to be lulling people into the idea that the end of September would be a great time to have all of this done. Why couldn't it be done by the end of June?

Mr. Simon Kennedy: I'll be very brief on this one. The end of September date is driven by the quarterly allocations of the two approved vaccines, Pfizer and Moderna. To the extent that additional vaccines are approved and deliveries occur, obviously that date can be put forward, but the end of September is based on two vaccines and quarterly allocations from those companies.

● (1245)

The Chair: Thank you so much.

Our next round of questions goes to MP Jowhari. You have the floor for five minutes.

Mr. Majid Jowhari (Richmond Hill, Lib.): Thank you, Madam Chair.

Once again, welcome to both deputy ministers.

Let me start with Mr. Kennedy. I just want to follow up on the question that you ran out of time to respond to from my colleague MP Erskine-Smith. You were talking about the various types of vaccines that are being developed. You were going to touch on the investment that we have made. Can you expand on that, please?

Mr. Simon Kennedy: Yes. I could just say, generally speaking, that if you look at the portfolio of international vaccine candidates that the government has purchased, there has been an effort to make sure there are a number of each of the main different types of vaccines. The ones that have been approved are using messenger RNA, but there are other vaccines that are protein-based. There are viral vector-based vaccines. There are different major platforms for vaccine production.

In the same fashion, when it comes to the efforts to boost Canada's biomanufacturing capacity, there has been a deliberate effort to make sure there are investments going to different kinds of platforms. For example, Minister Champagne mentioned the investment in Medicago. Medicago is a plant-based, virus-like particle vaccine. He mentioned the investment in VIDO-InterVac. That's a protein subunit vaccine. If I look at the investment in Provenance therapeutics, I see that's a messenger RNA vaccine.

The efforts on biomanufacturing and the support the government has given to the various Canadian vaccine candidates to advance their clinical trial work have been across these various kinds of technologies. The idea is not to put all of our eggs in one basket. It's to have multiple eggs and multiple baskets.

Mr. Majid Jowhari: In his opening remarks, Minister Champagne talked about the suitability for COVID-19 vaccine production. Even among those existing vaccine producers in Canada, he said the capacity is already allocated for some of the flu vaccine.

I have two questions. Number one, what would be considered suitable COVID-19 vaccine production? What qualifies, or what is unique about that? As part of either the vaccine task force or the Joint Biomanufacturing Subcommittee, did we explore working with those existing facilities to expand their capacity?

Mr. Simon Kennedy: Madam Chair, I'll try to give a brief answer. It's a very technical answer to give a full answer. I also don't want to pretend I'm a technical expert.

I would say that if we did a full survey of all of the assets in Canada.... As Minister Anand noted earlier, there were very active discussions to see whether we could get technology transfer to have some of these candidates produced in Canada. You need to match up the candidate you want to transfer with a facility that can handle it. It's a bit of a mix-and-match.

For example, certain vaccines actually have to be produced in a certain level of biosafety. You can't produce them next door to some other product. There are other vaccines where the biosafety level can be lower. If you take, for example, GSK in Ste-Foy, it has a facility that makes seasonal flu vaccines. That's an egg-based technology. The messenger RNA vaccines that are currently approved and being used are not able.... You don't produce messenger RNA using an egg-based technology. The challenge is that you have to have technology that's aligned to the vaccine.

Then the other thing Minister Champagne said—which frankly I think was really the more important and more salient point—is that the companies required scale to really make it interesting. I noted the honourable member Mr. Davies had asked, “Well, what about Korea? What about Mexico?” I just took a quick look at the capabilities in South Korea. South Korea has facilities that have bioreactors that actually can handle hundreds of thousands of litres of substance. In Canada, generally, in the facilities we were dealing with, we're talking about a few thousand litres, 5,000 litres, etc. There are [*Technical difficulty—Editor*].

The Chair: Mr. Kennedy, we've lost your audio. I've paused the clock.

Mr. Simon Kennedy: I apologize.

Maybe I'll stop, because I don't want to take up too much time. It's just to say, Madam Chair, that the international facilities we're generally partnering with—like AstraZeneca and others—were able to produce, by an order of magnitude, far more than any facility in Canada could produce.

The challenge for the companies is that technology transfer is a time-consuming effort. It isn't like getting a muffin recipe and you get the ingredients and you make it. Typically, it's six months or longer. You have to do small lots of the vaccine and prove you can do it. The technicians from the company have to be on site to check everything. When these companies were allocating effort, they had to focus on facilities that could produce massive amounts, not smaller-scale facilities that could produce a smaller amount.

Thank you.

● (1250)

Mr. Majid Jowhari: Thank you. That was great.

The Chair: Thank you so much.

Because we have a few minutes left, we're going start round four. I'll give each party a slot to ask some questions.

We will start with MP Nater. You have the floor for five minutes.

Mr. John Nater (Perth—Wellington, CPC): Thank you, Madam Chair.

I'll start with Mr. Matthews, from procurement.

Mr. Matthews, Minister Anand mentioned that she read the entirety of the Pfizer and Moderna contracts. Have you also read these contracts?

Mr. Bill Matthews: Yes, I have, Madam Chair.

Mr. John Nater: Thank you for that.

Could you let us know whether there is a specific clause within that contract that causes that entire contract to not be disclosed to parliamentarians? Could you give us some information on that clause?

Mr. Bill Matthews: The contracts themselves are confidential. That was across the board. This is an industry where they're very sensitive about protecting their IP, etc. You actually have to sign an NDA to even enter into negotiations with these companies. It is a very sensitive piece.

I think I have already answered that the Canadian contracts are confidential. As the procurement department, we take very seriously the government's obligations under contracts. We want to make sure we respect those.

Mr. John Nater: Thank you for that.

I'm not a lawyer. I'm just a farm kid from Logan township. Would an order of this committee or an order of the House produce the contracts to be reviewed in camera? Would that trump those non-disclosures?

Mr. Bill Matthews: All I can say, Madam Chair, is that I take the obligations under the contract very seriously. Any potential breach of contract would not only potentially limit the ability to get vaccines, but would also compromise future negotiations, if we're viewed as a department that doesn't respect the contract clauses.

We therefore take our contracts very seriously at PSPC.

Mr. John Nater: Thank you for that. I just find it interesting that AstraZeneca and the European Union have come to an agreement to disclose parts of that contract. The United States has disclosed parts of theirs. I find it interesting that our negotiations have not provided for at least some disclosure of those contracts.

I want to move on to the deadline that has been put out time and time again by the government that all Canadians who want a vaccine will receive one by September. Again, I've heard it said that the number of doses is being determined by quarter.

What reassurance can you provide to this committee that we aren't going to get the bulk of that allotment in late September for that third quarter, thereby making it impossible for provinces to actually get needles into people's arms before the end of September as has been promised?

Mr. Bill Matthews: Thank you, Madam Chair.

We have ongoing discussions with the suppliers about schedules. They start in earnest as regulatory approval gets closer. The notional quarterly allocations were set out in the summer, long before production was up and running.

We do have discussions with suppliers about the need for a steady, even flow of product for that very reason. We do want our provinces and territories to have time to ramp up. We are still in relatively early days. I think the first doses started arriving in the third week of December.

The plan is for those companies to ramp up production. As they do, Canada gets an increased allocation on an upward curve. That matches the ability of the provinces and territories to ramp up their delivery efforts right alongside the production ramp-up that companies are actually seeing.

Mr. John Nater: We've often been told that we need to be receiving two million doses per week to meet that September deadline. At what point, in your estimation, will we get to the point where we'll be regularly receiving two million doses per week?

Mr. Bill Matthews: It's a ramp-up by quarter. I think we know what the allocation is for next week. It's still early days in terms of Pfizer and Moderna, but there is a fairly steep ramp-up. It's not a straight line.

The math that was done was simply dividing the number of weeks left by the number of doses. There is a fairly steep upward curve. As the provinces and territories become more familiar with what's required to administer this vaccine, their ramping up of the actual vaccine delivery is happening as well.

● (1255)

Mr. John Nater: Could you at least give us an estimation of when you expect to hit that two-million dose mark? Are we talking about early April, early June or early July?

Mr. Bill Matthews: I think I can talk by quarter. The minister has already shared that in Q1 we're expecting six million doses in total of Pfizer and Moderna. You don't get there all at once, but there's a ramp-up to meet that need. Keep a close eye on it week to week, and you will see these things start to come up.

Mr. John Nater: Thank you for that. I see that I'm out of time.

I would just note that there appears to be a significant risk that so many of these doses are weighted toward the end of the third quarter. We have a significant risk that these will not arrive in time for all Canadians to have a vaccine by the end of September.

Thank you, Madam Chair.

Mr. Bill Matthews: Madam Chair, if I could interject, the plan is that Q2 will be bigger than Q1. There's a steady ramp-up in Q2, and that's really where the vaccine effort gets quite intense.

The Chair: Thank you very much.

Our next round of questions will go to MP Lambropoulos.

You have the floor for five minutes.

Ms. Emmanuella Lambropoulos: Thank you, Madam Chair. I'll be splitting my time with MP Ehsassi.

I rarely engage in partisan politics, but I don't like the opposition constantly saying that we will not be meeting our September targets, when it's clear in the contracts—and when people who have been negotiating these contracts are saying it—that we will be meeting it by the end of September. It instills fear in Canadians, and it uses fear in order to gain support from Canadians. I don't think that's the way we should go.

If you could send one message to Canadians about vaccines and whether or not Canada is on the right track to receive the amount they've said they're going to receive by September, and that we're going to have Canadians vaccinated by a certain date, what is that message?

Mr. Bill Matthews: Thanks, Madam Chair. I can only speak to it from a contractual perspective.

We have enough vaccines under contract for the two approved vaccines to get all Canadians vaccinated. We have delivery schedules that will get us there by the end of September. As more vaccines get approved—should they get approved—we have a chance to improve on that.

It is a steady ramp-up of deliveries. These are production lines that are still relatively new, so it makes perfect sense that early Q1 deliveries will be smaller than Q2's. This is a steady ramp-up, and there are enough vaccines under contract for already approved vaccines.

Ms. Emmanuella Lambropoulos: Thank you.

Mr. Ali Ehsassi: Thank you to my colleague for sharing her time.

I'd like to go to Mr. Kennedy, if possible.

Mr. Kennedy, I found your testimony to be very, very helpful. Unfortunately, it appears, according to what some of the members are saying, that we're drawing parallels between the U.K. and Canada. You rightly pointed out that the retrofitting in the U.K. started in 2019, and you have been examining their approach to biomanufacturing.

Would you like to elaborate on that, so we all understand full well that the capacities in Canada and the U.K. were not the same?

Mr. Simon Kennedy: Madam Chair, we are working very diligently to support the government in rebuilding Canada's biomanufacturing capacity, but the main point, which I think is indisputable when looking at the facts, is that we're unfortunately starting from a much lower base.

The U.K. is home to two of the world's largest pharmaceutical companies, which are both involved in the production of COVID vaccines: GSK and AstraZeneca. They had, going back many years, even earlier than 2017, a fairly sophisticated strategy for life sciences that involved investments in the sector. I believe it was in 2017—I'd have to triple-check—that they launched discussions about further reinvestment in their industry.

This is something that the vaccine task force looked at in terms of whether there were lessons learned for the Canadian experience.

As an example, they are now in the process of constructing their vaccines manufacturing and innovation centre, which will be a large facility that will be partly dedicated to research and partly available for commercial vaccine production. As I said, the contracts for that were let in 2019, and it is not finished being built yet. My understanding, based on the analysis we've done, is that some of the equipment that their contract manufacturers are using to make COVID vaccines has been relocated from this facility under construction to the contract manufacturers.

The main point is that the U.K. started from a much higher base, has a larger contract manufacturing industry, had already been actively investing, studying and consulting, and had shovels in the ground to build further capacity. In fact, they were actually able to borrow some of the stuff that was already in flight when the pandemic hit, to pivot it. There's really no comparing the situation with Canada.

With regard to Sir John Bell's comments that all things being equal, it would be better to build stuff domestically, we share that sentiment 100%. Obviously, for the future, and for next year and beyond, the objective would be to be in exactly that position. If you cast back nine or 10 months ago, there was.... The conclusion of our leading experts, and from the analysis we did, was that the notion that we build a brand new factory from the ground up, have it licensed, do the tech transfer and commence vaccine deliveries would have been a risky proposition, to say the least.

I think there are lessons to be learned, but we are in a very different position from the United Kingdom. I can assure you of that.

● (1300)

Mr. Ali Ehsassi: Thank you for that.

The Chair: We will now go to Mr. Lemire.

[*Translation*]

The floor is yours for two and a half minutes.

Mr. Sébastien Lemire: Thank you, Madam Chair.

I also thank the witnesses.

Mr. Matthews may be able to answer my question, but it is intended for all the witnesses.

Is Canada prepared for a mutation of the virus? If so, will the contracts be sustainable? Will it be possible to adapt them? Should the virus mutate, could the Canadian strategy really enable us to be resilient and achieve the objective of vaccinating everyone by September?

Mr. Simon Kennedy: I can provide an answer, and Mr. Matthews could add to it.

This is actually one of the reasons we have engaged in a discussion with Novavax to localize production. This does not concern only the existing vaccine. It's also in case we need an additional booster dose or new versions of the vaccine. The purpose of the ongoing work and other investments in Canadian options, such as Medicago, is to prepare us for potentially needing new versions of the vaccine.

This is certainly a priority for us in terms of biomanufacturing.

Mr. Sébastien Lemire: Thank you.

Mr. Matthews, do you want to add anything?

[*English*]

Mr. Bill Matthews: Madam Chair, the only thing I would add is that it's a really important question, and it's a question probably better posed to the health experts or the vaccine manufacturers. They are certainly actively watching the various variants that have emerged and are wanting to understand how their vaccines hold up against those variants.

It's too early to say, as far as I know, but that's a better question for the health folks.

[*Translation*]

Mr. Sébastien Lemire: You have had access to the contracts, unlike us.

As far I have understood, two meetings were held recently between the Prime Minister of Canada, and the new U.S. President and Vice President, where they talked about collaboration to beat COVID-19, among other things.

What can we expect from those negotiations?

[*English*]

Mr. Bill Matthews: I'll be very brief, Madam Chair. I can't speak to what the Prime Minister and the U.S. President spoke to. I'm just not in a position to share. I'm sorry.

[*Translation*]

Mr. Sébastien Lemire: Okay.

My time is up, so I thank you.

[*English*]

The Chair: Thank you.

Our last slot will go to MP Davies.

You have the floor for two and a half minutes.

Mr. Don Davies: Thank you.

Well, I must say that I'm left with some confusion about AstraZeneca, whether Canada is not manufacturing here because we don't have the capacity to do so or because we didn't negotiate the right to do so.

Amir Attaran testified at health committee this week. He said:

> ...the National Research Council knows how to make vaccines. Its brilliant scientists were the world's first to fully deploy an adenovirus-vectored vaccine (for rabies) ahead of any pharmaceutical company. Why can't the federal government seal a licensing deal with AstraZeneca to make its adenovirus-vectored COVID-19 vaccine for Canadians using the NRC's equipment?

First, is the reason the NRC isn't producing the AstraZeneca vaccine in Canada because they don't have the capacity to do so, or because we didn't negotiate the right to do so?

Mr. Mitch Davies (President, National Research Council of Canada): Madam Chair, perhaps I can start. Then I'll ask a colleague to talk about the contractual negotiations.

It is a fact that the researchers at the National Research Council are familiar with the technology underlying the AstraZeneca vaccine. In fact, the facility that is being built, the biologics manufacturing facility, would have the capability to make that type of vaccine. The important matter, of course, is the company with which you're going to strike a deal to pursue that. In this case, we announced earlier this week the MOU with Novavax, which is to pursue production at that facility and in line with our capabilities, which have been mentioned.

I'll ask my colleague if he'd like to provide further information in terms of the discussions that were undertaken with each of the vaccine manufacturers, including AstraZeneca, which I think Minister Anand did address. It was part of those conversations at the early stage.

● (1305)

Mr. Don Davies: If I may, I have limited time. I'll just ask my last question, and then whoever wants to answer it can do so.

Minister Anand confirmed that we tried and failed to get domestic production from AstraZeneca when many other countries did. We know that the EU, the U.S. and Brazil can release contracts, or significant parts, so they obviously didn't have the same restrictive confidentiality requirements that Canada did. You're telling us that successive federal governments have let Australia, Brazil, Mexico, Argentina, India, Japan, South Korea, China and other countries get domestic vaccine capacity that Canada doesn't have.

My question is this. Is it safe to say that, relatively speaking, it's pretty clear that Canada did a relatively poor job in both negotiations and pandemic preparedness?

The Chair: Be very quick.

Mr. Simon Kennedy: Madam Chair, I can give a brief answer on the issue of capacity.

The countries that the honourable member mentioned generally had in place at the outset of the pandemic substantially greater biomanufacturing assets available. South Korea has huge biomanufacturing capability, as Minister Champagne mentioned. The Serum Institute of India, that one facility alone, is slated to be producing more than a billion shots for COVID.

These large multinationals, when they were looking to produce and looking to dedicate scarce resources to technology transfer, were looking for facilities that could produce at scale. As has already been noted, Canada did not have surplus capacity to produce at scale. Certainly, the facilities we do have—and there are excellent companies here—either had the wrong technology or were already dedicated to vital products, such as for pertussis, polio, diphtheria and those sorts of things.

I'll stop there.

The Chair: Thank you so much.

That is our time for today.

I want to thank Mr. Matthews, Mr. Kennedy and Mr. Davies for being with us and for staying a little extra to allow our members to ask these vital questions.

I want to thank the members for their excellent questions today. I think this was a great meeting.

[*Translation*]

A big thanks to the interpreters, the clerk, the analysts and the IT team.

[*English*]

Thank you so much for everything today.

As you know, we will have the vaccine task force with us the week of February 15. If you have additional witnesses that you would like to hear from with respect to this study, please make sure to get those lists to the clerk so that he can reach out. Again, it could be a rolling list. You don't have to have your final list. That would be fantastic.

That being said, I call this meeting adjourned. I'll see you next week.