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Chair

Mr. Bernard Patry

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● (0905)

[English]

The Chair (Mr. Bernard Patry (Pierrefonds—Dollard, Lib.)): Pursuant to the order of reference of Tuesday, December 7, 2004, we are resuming consideration of Bill C-25, an act governing the operation of remote sensing space systems.

As witnesses this morning, it is our pleasure to have with us from RADARSAT International, Mr. John Hornsby, president; from ImStrat Corporation, Mr. Tom Last, president; and later this morning probably from McGill University, Ms. Lucy M. Stojak, professor, Institute of Air and Space Law.

Welcome. We'll start with Mr. Hornsby please.

You have a presentation. Go ahead.

Mr. John Hornsby (President, Radarsat International): Thank you, Mr. Chairman.

We have submitted a brief ahead of time and I'll go through that, not word for word, but picking out the key points. By way of introduction, as was just said, I am the president of RADARSAT International. We are a subsidiary wholly owned by MacDonald Dettwiler and Associates, which is a large aerospace company based in Richmond, British Columbia, and specifically involved in the design, construction, and operating of space systems. Things you're probably most familiar with are the robotics on the shuttle on the space station.

Our business at RSI is supplying products and services from earthobserving satellites, which is the same as remote sensing satellites.
Primary sensor for most of our business is from RADARSAT-1,
which has been up and operating since 1995. We will be operating
RADARSAT-2 when it's launched in early 2006. The whole program
is part of a public-private partnership with the Canadian government,
CSA in particular. Besides that, we are also involved in a number of
other satellite programs around the world, as you can see in our brief
—a number of privately operated as well as government satellites
from the U.S., Europe, Israel, and India. There are a number of these
satellites that are up and operating, doing earth observation for a very
broad range of applications.

As further background, we've also had the opportunity, and we appreciate that, to provide some input along the way, as this bill was being drafted, through the interdepartmental working group. Through that, we recognize that the parties involved are trying to achieve a balance between public and government requirements as well as those on the business side, and making sure that's looked after.

I think a good case in point is with RADARSAT-2. We are entering into agreements now that come under the substantial agreement category that require government approval, and those have provided some very practical cases that helped to steer some of the wording ultimately that's gone into this bill.

So we've been very appreciative of that opportunity, and also of course today of the opportunity to provide some final input here. There are still some areas where we have concerns, which we will go through. But first I'd like to touch on some of the more positive aspects of the bill. It provides for a needed flexibility and practicality for licensing satellite remote sensing systems. Taking into account that this is a global industry—I mean it has global applications, it's not just in Canada—the reality is there is competition in the marketplace and we have to be able to evolve and adapt over time in order to meet that.

More specifically, just to run through a number of points, I think the legislation is quite clear with respect to its application and mandate in terms of who is required to have a licence and who is not. That was quite key. It takes into consideration, to a degree, the need for remote sensing satellite businesses to keep pace with technological advances and keep the Canadian industry competitive. It has been drafted to allow the continued international distribution of remote sensing products—basically the ongoing business that we've been doing for many years already. It has a practical manner in which the application of the legislation can be implemented and corresponding penalties and fines. And also it uses familiar concepts in the industry in terms of describing the various articles.

As I mentioned, there are still a few areas of concern, and I'll run through these fairly briefly. They're all outlined in the brief. Just to list them, there's the concept of international relations and obligations, which is a concern. There's the whole concept in terms of timeframes and responsiveness of the government in the process here—representations to the minister, disclosure requirements, responsiveness to international developments. And then—I won't go into any detail—there are areas that ultimately will be dealt with in the regulations, below this document, but I just want to mention a few things there.

So first, the concept of international relations and obligations appears in a number of clauses—10, 11, 12, 13—and basically allows the minister to amend, suspend, or cancel an operating licence

## **●** (0910)

The terms "international relations" and "international obligations" are not defined in the bill and as a result could be interpreted very broadly. That's the big problem from our standpoint, because we don't know what the bounds are. There is the potential for a very material impact on the business if they are implemented on a fairly broad basis. I think it can be fairly well understood that if our service is interrupted, obviously we can't generate the business, and that's a big problem particularly with these kinds of programs.

If we take RADARSAT-2 as a case in point, there's an investment of millions of dollars here, and obviously you need to manage all the risks and know the boundaries of when the government can step in and put a halt to the business. We need to understand that very well. So what we're proposing here or suggesting to the committee is that these terms be defined more specifically within the document so that we know what the boundaries are.

In the context of timeframes, I'll make reference here to the comparable bill in the United States, which has been in place for a while and I think has served as a bit of a basis for the formulation of this document. Within that, there are a number of timeframes set out. I'll just list them specifically here: the government responding to a licence application within 120 days; amendments to the applications within 120 days; review of significant or substantial agreements within 60 days; and then the appeal hearings within 21 days; and 30 days for other steps.

Unfortunately, Bill C-25 doesn't incorporate any of these timeframes. There are timeframes to respond on the licensee side of things, but nothing on the government side. This is a great concern for us, largely driven by, basically, the experience the company has had in the past in terms of getting responses on export permits and things like that. These things can drag on for a great period of time without any response coming back.

The third area is in terms of representation to the minister. Mainly within clause 14, regarding interruptions of service, it provides the licensee an opportunity to make representations to the minister within 15 days of receiving notice of order to interrupt the services. This is obviously a good thing; however, the same opportunity doesn't exist in the original application process, which is arguably a very important part. There should really be an opportunity to either get feedback or maybe go through an iterative process, rather than simply getting a response saying no, you can't have a licence. So that's what we'd request. Basically there would be incorporated also within that original application process a similar ability to have the feedback and be able to make representation to the minister on the licence.

The fourth area is in terms of disclosure, again relative to interruption of services and priority access in clauses 14 and 15. Non-disclosure on the basis of an order is reasonable, obviously, for reasons of national defence and Canadian security. Clearly we don't have any issue with that. The concern again comes back to this notion of international relations and obligations. We feel that if something like that is implemented, there ought to be at least some reason communicated to the licensee. This can always be held in confidence, but for these kinds of activities, we feel that is appropriate and suggest that be incorporated.

The fifth item is in terms of responsiveness to international developments. To make a general statement here, the remote sensing industry is really fairly dynamic. It's a global one, as I mentioned earlier, and it's changing rapidly over time. If we take the timeframe when this whole process began in terms of drafting Bill C-25, the area of concern is that if you look at the capability of the satellites in terms of imaging, timeliness, and all these things, it was a different time from today and there was also clearly not as much capability out there as there is today.

#### **●** (0915)

Now there are a lot more satellites launched purely by industry, and for the Canadian industry to stay competitive, this legislation—and ultimately the regulations that go below it—needs to be able to adapt and change with the times, basically, because they will change. It's a technology we're dealing with, and it will evolve over time.

Again, the RADARSAT-2, a leading-edge technology, is a bit of a case in point. We thought we would be basically in a very strong position in the marketplace, but there's a European satellite that actually has a higher resolution than we have currently due to be launched not long after the RADARSAT-2 timeframe. The current normal restrictions placed on RADARSAT-2 are going to have to evolve, therefore, if we're going to be able to compete with this other European satellite.

The sixth item here deals with the regulations. We have some specific concerns, but we understand from the process you went through with the IWG that these are actually dealt with in the regulations, so I'm not going to go through them specifically—they're listed in the brief—except for one item here that I will mention.

In article 22 under the regulations there's no financial compensation for losses resulting from suspension or cancellation of a licence. There is an opportunity for the licensee to go back to the minister and request compensation, but there's no obligation on the government. We're asking here for it to be carried through, down into the licences and the regulations that are granted, that there is some sort of recourse, so a company can go back to the government with the potential for financial compensation if its business is severely affected.

In conclusion, speaking for the company I represent, we greatly appreciate the opportunity to provide these comments and recommend some changes here to the draft legislation. We recognize clearly the necessity for the government to license operators of remote sensing systems. We still have some areas of concern here. I'd also point out that Canada is a world leader in this industry, and it's important that the legislation, and the corresponding implementation of it, maintain this competitiveness.

I will make a reference here again to what was a very strong message on the U.S. side. We hope these kinds of sentiments also carry through for the Canadian industry. They have similar regulations in place clearly stating that they're also aiming to develop a long-term sustained relationship between the government and the commercial remote sensing space industry. They have committed to providing a timely and responsive regulatory environment, and they're clearly trying to focus their industry to maintain a very competitive edge in the international marketplace. I hope these same sentiments can be carried through within government legislation here, Bill C-25, and ultimately in the implementation of that bill.

That's all I have to say, Mr. Chairman. Thanks very much.

• (0920)

The Chair: Thank you, Mr. Hornsby.

We will now pass to Mr. Tom Last, please.

Mr. Tom Last (President, ImStrat Corporation): That you very much, Mr. Chair.

I would like to just go through my statement. Essentially, I'd like to read right through it, if you don't mind.

I would like to take this opportunity to thank the members of the committee and its staff for inviting me to express my views and concerns on Bill C-25. Even though I am not a licensee of a remote sensing satellite system but a value-added service provider, I hope my comments and views will be helpful to ensure a fair and balanced bill

The Chair: Would you speak a bit more slowly, please, because of the translation?

Mr. Tom Last: I'm sorry.

Before I begin on key points in the bill, I would like to define what I consider to be a successful Canadian business.

A successful Canadian business is one that is profitable, expanding in resources, and adding capabilities based upon a company's own revenue generation through profit-based contracts and—of great importance—a diverse customer base, thereby ensuring not only self-sustainability but growth. In my view, this point is critical to being a successful Canadian company in a global economy.

The Canadian geomatics and remote sensing industry has a long and varied history. That history has primarily been marked in large part by supporting provincial and/or federal government geomatics initiatives, be it topographic mapping, forestry, agriculture, or ice monitoring.

In recent years, Canadian geomatics-based companies have begun to pursue international opportunities. In light of this, few have been clearly successful in achieving a tangible market share within the global economy. Nonetheless, some noteworthy market successes should be mentioned. Two are PCI Geomatics, of Richmond Hill, Ontario, and, of course, RADARSAT International, of Richmond, British Columbia.

PCI Geomatics has been very successful in selling and in international exports of its powerful remote sensing data processing

software throughout the world. RADARSAT International has combined its excellent technical services and support, along with a uniquely Canadian international marketing and business development model that allows the company to effectively compete on the international stage with what is known as one of the most difficult remote sensing products to sell around the world: radar.

For comparison purposes, the United States-based geomatics and remote sensing industry is, like the Canadian industry, an internally focused industry. There was and still continues to be a considerable market focus upon U.S. federal and state government sales in order to maintain business success. This is understandable considering the United States government's full appreciation and use of remote sensing products over the past number of years and well into the future. As such, U.S.-based remote sensing companies such as Space Imaging and Digital Globe have a high dependency on government contracts to maintain profitability and a financial base in order to secure private financing for their next generation of high-resolution remote sensing satellite systems.

In terms of international market share, these two companies have not been as successful as was hoped. Various factors can be attributed to this, one being the export restrictions imposed by U.S. government regulations. As such, U.S.-based companies are able to maintain profitability but do so from an internal perspective, while select Canadian-based companies are able to maintain success from an export point of view. This leads to how Bill C-25 could impact upon the success of Canadian companies within the global economy.

In general, I agree with the need for this bill to be put in place. We live in an unstable world now, and we will in the foreseeable future. We live in a world of multi-dimensional threats, ranging from possible direct terrorist attacks against domestic targets and international interests, to regionally based conflicts in emerging nation-states that are seeking Canadian technology for uses beyond the intent of its original use.

It is no surprise that remote sensing technology must be protected to ensure that this technology is not used for intelligence collection and targeting against Canadian military forces, Canadian infrastructure, or our allies. However, from a Canadian small business perspective, I have some key concerns about this bill, which could impact upon my company's and possibly other Canadian companies' abilities to succeed in the international economy. I trust these points will be taken into consideration.

Understanding that this bill directly impacts on RADARSAT International and MacDonald Dettwiler and Associates as the licensees for RADARSAT-2, when a potential value-added service provider wishes to purchase the data, the value-added user must abide by the terms and conditions of sale. Upon passage of this bill, it is foreseen that RSI will amend the terms and conditions of sale to reflect these new rules. As such, this could impact upon my willingness as a company to sign onto a sales agreement that is based upon the bill's present form.

In particular, I would like to address four areas of concern. These are clauses 8, 10, 14, and 15. Under subclause 8(7), it states that

the Minister may restrict the provision of remote sensing products or classes of such products from the licensed system to persons or classes of persons other than the licensee or system participants on any conditions that the Minister considers appropriate.

From my perspective, not having access to a list of persons or groups of persons will limit my ability to determine who could or could not provide data products as part of a value-added package.

#### **●** (0925)

In order to rectify this, it is highly desirable for the Canadian government to provide regular, updated, monthly or quarterly lists of persons or a group of persons to not only the licensee, but directly to any Canadian geomatics value-added service provider. What is of concern is that under many circumstances, the value-added service provider not only provides the end-user product, but also the original data set used within the production. Therefore, it would be necessary to have direct access to this list directly from the government.

If the intent under the bill's regulations is to pass a list of persons or a group of persons directly to a licensee for the screening of potential clients, this could lead to a potential conflict between the licensee and the value-added service provider. In order for the licensee to screen for potential persons or groups of persons, the value-added service provider would have no choice but to inform the licensee, in this case RADARSAT International, of the potential clients' particulars.

This may sound innocent enough; however, it must be noted that the licensee also competes directly with the value-added service provider in the global market in certain vertical market areas. Clearly, under this scenario, the licensee would have an unfair advantage with the value-added service provider informing of potential clients' complete information.

Again, under subclause 10(1), some form of transparent regulation mechanism needs to be in place to inform value-added service providers of any changes or amendments that could occur. This purely informative process is in order for the value-added service providers to make any necessary market adjustments. It would not be intended to allow value-added service providers to make representations regarding it.

Under subclauses 14(1) and 14(2), the Minister of National Defence may interrupt or restrict access over a specific period. In regard to the minister, this would be in light of Canada's conduct of international relations or inconsistent with Canada's international obligations. For the Minister of National Defence, it would be based upon continuation of an operation that would be injurious to the defence of Canada or the safety of the Canadian Forces.

In terms of Canadian national security and the security of the Canadian Forces operations, I can understand and accept this particular subclause of the bill. What is worrisome to me as a value-added service provider is what constitutes Canada's conduct of international relations and inconsistent with Canada's international obligations. Does this mean the minister can interrupt and restrict access based upon other treaty arrangements or agreements with foreign governments? If so, what treaty agreements are they? Does it mean the minister can simply interrupt or restrict access in order to appease other nations' concerns, thereby maintaining good relations over the interests of Canadians and Canadian business opportunities?

As one who has not read the specific guidelines that this bill covers, I find subclause 15(1) very disconcerting. Under this section, it appears the minister is authorized to order the licensee to provide direct service support to the federal government on behalf of another nation's government and its respective agencies. This one section could easily be used as a direct government-to-government sales channel for a foreign government to Canadian data products and services, all in the name of good relations. Essentially, this could negate a commercial contract opportunity by the licensee and value-added service providers. Therefore, my question is this. Under what circumstances would subclause 15(1) be imposed?

In conclusion, I would like to restate that in general I agree with the intent of this bill. However, it appears this bill ensures the Government of Canada's interests and needs are met at the expense of the licensee and potentially the value-added service providers. This could significantly impact upon the ability of Canadian geomatics and remote sensing companies to aggressively and competitively pursue international contract opportunities.

Without transparent and clear guidelines set out to allow individual Canadians and corporations to make informed decisions, value-added service providers such as ImStrat Corporation will be reluctant to use Canadian-based remote sensing data products.

I hope my comments have assisted you in further understanding my perspective of this bill. I may have offered more questions than solutions, but I hope these questions will allow you to consider another point of view of this important piece of legislation.

Thank you very much.

**●** (0930)

The Chair: Thank you, Mr. Last.

Now we'll welcome Ms. Stojak, professor, Institute of Air and Space Law at McGill University.

Ms. Stojak, please.

Professor Lucy M. Stojak (Institute of Air and Space Law, McGill University): Thank you, Mr. Chairman.

Let me read the brief notes I've prepared and perhaps add a few bullets at the very end concerning Bill C-25.

The launch of Canada's first earth observation satellite, RADAR-SAT-1, in 1995 demonstrated Canada's commitment to supporting sustainable resource development through the use of remote sensing. It also confirmed the ongoing cooperation between the public sector, notably the Canadian Space Agency and the Canada Centre for Remote Sensing, and the Canadian private sector in the development and commercial exploitation of this technology.

In developing RADARSAT-1, Canada adopted a hybrid of public-private funding and operational arrangement. In 1994 the Government of Canada gave approval to the long-term space program, which among other things established earth observation as a priority of the Canadian space program. It should be noted also that in the latest Canadian space strategy developed by the Canadian Space Agency in November 2003, earth observation remains a top priority.

When the request for proposal was put out for RADARSAT-2, the private sector was invited to contribute financial investment in the construction and operation of the satellite. Therefore, MacDonald Dettwiler was ultimately selected to construct and manage RADARSAT-2. Unlike RADARSAT-1, RADARSAT-2 will be owned entirely by MDA—though substantial financial contribution has been provided by the Canadian Space Agency.

The enhanced capabilities of RADARSAT-2 will make it the highest resolution SAR commercially available at the time of its launch. As the ownership of remote sensing satellites was to move from the public to the private sector, the Canadian government announced its intention to develop new legislation to control these commercial remote sensing satellite systems.

I'd like to briefly highlight the international legal framework. Although this is national legislation, remote sensing is a space application, and therefore there are international treaties and guidelines relevant to the discussion, two in particular. One is the Outer Space Treaty of 1967. The collection of earth-related data from outer space is permitted under international law. The Outer Space Treaty does not specifically address the issue of satellite remote sensing, but in stating that "Outer space...shall be free for exploration and use by all States without discrimination on a basis of equality and in accordance with international law", the treaty implicitly allows space-based earth observation activities.

The freedom of use and exploration is a governmental right pursuant to article 1 of the treaty, which explicitly states that "States" are the ones entitled to explore and use outer space. Nevertheless, non-governmental space activities are allowed under article 6, though the right of private entities to carry out space activities is conditional upon state supervision.

Most often, states choose to fulfill their obligation of supervision and control by enacting legislation, regulations, and licensing procedures. Therefore, the enactment of the Canadian legislation on remote sensing satellites, along with the regulations and licensing, will ensure that Canada, as a signatory to this treaty, fulfills its obligation, namely, to ensure a continued authorization and supervision of activities of its private entities.

The second international instrument that should be mentioned is called the United Nations principles on remote sensing, which is a set of non-binding instruments with certain provisions that have been repeatedly applied by states who practice remote sensing. I'd just like to highlight two of these, pursuant to the principles. A "sensed State"—in other words a territory that is being photographed, for lack of a better word, by a remote sensing satellite—is granted a right of access to the primary data and the processed data concerning its territory "on a non-discriminatory basis and on reasonable cost terms". Reasonable cost terms have, over the years, been interpreted as meaning at a reasonable market price. It also makes reference to

"analysed information". For such information, a sensed state has access to it "on the same basis and terms" as it is put up for sale to the international community.

In terms of Bill C-25, I would like to make the following comments. First, Canada is obviously not the only country that is struggling to enact legislation applicable to remote sensing satellites. The United States by far, because of its budgets and its different types of satellites, has the most detailed legislation dealing with remote sensing, be it commercial operators or government systems.

● (0935)

In 1999 when Canada adopted the access control policy and when a year later it also signed a bilateral agreement between Canada and the United States, the title of this bilateral and the access control policy was to apply to commercial remote sensing satellite systems. The current bill is entitled an Act governing the operation of remote sensing space systems. Therefore, by omitting the term "commercial", the act applies to all systems, be they governmental or private. My first comment would be that under the present bill the inclusion of clause 4 of the proposed act, which stipulates that the Governor in Council may make an order with respect to remote sensing space systems operated by Canada's Department of National Defence or the Canadian Space Agency, is one that is novel, but I believe it is an important one because certain scientific or experimental remote sensing satellite systems need not necessarily be submitted to as much stringency, let me say, as perhaps some of the commercially operated systems.

In terms of the scope of application, the bill is quite large, and the term "person" includes a partnership, a government, a government agency, and an unincorporated agency. The requirement also applies to activities outside of Canada. Again, when compared with legislation existing in other countries, this is not unusual. The high level of concern for national security and foreign policy make for a broad interpretation of the word "person", so that a Canadian conducting activities outside of Canada need also obtain a licence. Again, the fundamental principle is that Canada as a state and as a signatory to the Outer Space Treaty ultimately will always be held responsible for the activities of its government agencies and the private sector. So the link to bringing it back to Canada is quite strong and is based on international law, which has been followed consistently since this treaty was enacted in 1967.

The rights that are reserved by the Canadian government are rights to license, to review, and to approve all remote sensing systems that are owned, operated, and registered in Canada. Limits can be prescribed based on national security and foreign affairs interests.

The second primary right reserved by the Government of Canada is access control, which gives the government the right to interrupt normal service when availability of the data could be detrimental to, again, national security or foreign affairs interests. This access control, which is commonly referred to as shutter control, certainly appears in U.S. legislation for countries that do not yet have legislation but have remote sensing satellite systems. Although there's no written text, I would say that de facto shutter control has been invoked for many years by the operators of Spot Image and by operators of emerging satellite systems as well. The increased high resolution that remote sensing satellites can now offer and the changed geopolitical circumstances we now live in I believe have made it almost necessary to include shutter control provisions in legislation pertaining to remote sensing operators.

This being said, if you read through a lot of the comments made when the U.S. regulations and legislation were being passed, the private sector was very much concerned by issues that have been raised by my colleagues here about having the government willy-nilly call shutter control and therefore cut off a profit flow from these companies. It goes without saying that invoking shutter control must be done for critical reasons, must be done for a short period of time, even, if possible, for limited geographical areas. I believe it's important that private companies and private industry be assured that this will be the case.

The third right that the Government of Canada has retained is priority access, again at the ministerial level. If it's deemed that there are issues of national security, certain data can be requested on a priority basis.

Different types of conditions may be placed. One that's of particular importance to note is the use of encryption devices as a means of controlling access to data. Encrypted data can be considered a form of hybrid good since it retains the non-rivalry condition of a public good, but would be exclusive in that only those people who have the access keys would be able to benefit from it.

(0940)

In trying to negotiate, or legislate, or draft this legislation, certainly you had competing interests. You had issues of security, issues of foreign policy, and issues of trying to maintain Canadian competitiveness in this business. But there was also another issue, which is that of the data itself not being seen as a private good, but serving very much the public needs of Canada.

So this public good versus private good I'm sure was also something the drafting committee needed to tackle. By allowing under certain conditions the use of encrypted data, one could see that this would allow different categories of users to perhaps either pay different prices or to have access to the data under different conditions.

In terms of the duties and responsibilities of the owners of the registered entities, you need to obviously register with the appropriate minister and the Government of Canada and you need to maintain records. What is important and is highlighted in clause 16, for example, is being able to maintain positive control of the remote sensing systems so that you can execute such control solely from the Government of Canada jurisdiction, unless there's ministerial approval. Again, because of the high stakes in terms of

national security, this is not uncommon in other legislation adopted by active players in this field.

Another point that should also be mentioned, and this is in view of the United Nations principles I mentioned earlier and the obligations Canada has pursuant to the Outer Space Treaty, is that subclause 8(4) refers to raw data and remote sensing products whereby the government of a state that is sensed is entitled to obtain this data on reasonable terms and within a reasonable timeframe. Again, if there is a value added to the data, then this provision does not apply. We have to understand that it applies to raw data and not to value-added data, so that the commercial sector need not be overly concerned with this particular issue.

In closing, I would like to highlight a few things that do not appear in the legislation, or at least I did not see them in their current state. It's clear that within the regulations a lot more precision and detail will be provided. Two points merit attention, I think. One is in terms of being able to keep archives of remote sensing data. It's been shown over and over again that for studies that deal with global warming, or the ozone layer, to be able to go back in time and compare data sets is of invaluable importance to scientists and researchers.

Again, I cite as an example the U.S. legislation because it is the most detailed, simply because of the huge quantity of different types of satellites they have. In it there are clear provisions that call for archiving, even if systems are operated by the commercial sector. There are obviously costs involved with this, but a commercial operator has the obligation to inform the national archives centre that it wants to dispose of data so that the archives have a chance to buy it at cost to be able to save it as a resource for future use. I don't see any reference made to that in the current legislation.

There is another thing. There are two ministers who are entitled to request either priority access or shutter control. They are the Minister of Foreign Affairs and the Minister of National Defence of Canada. I don't see anywhere either provisions for consultation.... I think if I were someone who wanted to launch myself in this business, I would be concerned about wasting time, about having my application being on someone's desk. So the ability to implement the regulations efficiently and to have efficient consultation between the ministers and the departments involved I think is a key issue. Again, I'm not raising a concern about the fact that there is more than one ministry involved, but the lack of any wording that indicates there is consultation perhaps is something that ought to be noted.

Thank you for your attention.

• (0945

**The Chair:** Thank you, Professor. Now we're going to start with the questions and answers. We'll start with Mr. Sorenson, please.

Mr. Kevin Sorenson (Crowfoot, CPC): Thank you.

Thank you for appearing today.

As parliamentarians, we sit down to a bill like this, but with technology and some of the things that are happening with satellites, we certainly don't understand the industry. As we've studied this bill, I think we've learned a little bit about it, but certainly the intricacies, the technicalities, or the technology, a lot of it, I never will understand completely.

I understand that in this country we use this type of information a lot. We use it on farms, we use it with the environment, and we use it for national security. Much of what we use nowadays is based on satellite pictures and satellite technology, so it's becoming more and more important in this new age that we're living in to have access to some of this information.

As parliamentarians, there are also issues politically right now that we need to be aware of. One of those issues is on the ballistic missile defence system. That's highly debated now. Some of the papers haven't really talked a lot about this bill, but some of them have talked about the potential for some of the information being used with ballistic missile defence. I'm not sure what the column said. It was in the Toronto paper some time ago. They talked about how this type of technology can be used for military or other purposes.

My question to you is this. Is there a fear that this is somehow going to be used in the proliferation of weapons or that this technology would be used in a negative way?

The Chair: Who wants to answer?

Yes, Mr. Hornsby.

Mr. John Hornsby: I can perhaps start.

As far as missile defence, I don't see any connection whatsoever with that. These are satellites that are looking at the earth for all the applications you've described. I don't know that much about the whole missile defence thing, but it's looking at missiles coming in. There is no connection whatsoever. I don't know how the reporters have made that connection, but they have. Certainly from my standpoint, and probably my colleagues' standpoint, I don't see any connection whatsoever.

One of the areas of application for earth-observing satellites is for defence intelligence. That's one area. Typically it's not used in a tactical way. It's more of a strategic use, looking at changes over time. Part of the reason for having this legislation is so that people have access to the data. It's known by the government and potentially restricted in some cases, but this whole missile defence thing seems to be totally wrong.

The Chair: Professor Stojak.

Prof. Lucy M. Stojak: Yes, I'd like to add a few points on that.

Mr. Hornsby is right in indicating that current remote sensing satellite data is extensively used by the military for a variety of reasons. It's used for arms control purposes. It's used for treaty monitoring purposes.

Again, if you want to come back to the broader picture and go back to the building blocks of treaties that apply to outer space, one of the fundamental principles of the infamous Outer Space Treaty is that it's to be used for peaceful purposes. It's based on state practice and on the fact that a lot of satellites are being used for support purposes by militaries around the world. The term "peaceful purposes" has, over the years, obtained an interpretation equivalent to non-aggressive as opposed to non-military. The fact that military agencies around the world extensively use remote sensing satellites is nothing new, and it's certainly not going to go away.

In fact, for example, I would argue that the operators of RADARSAT-2 would probably very much want to be among the

providers to an agency in the United States called NIMA that has huge budgets to purchase images that will help support military activities. To have someone from the military as a client of remote sensing data is not new. It's already happening. For the very fine resolution data, the primary customer for years to come will remain the military.

In closing, I don't really see a link with ballistic missile defence, because it's really taking pictures of the ground and providing support to the military.

• (0950)

[Translation]

**The Chair:** Thank you. We will now give the floor to Ms. Lalonde.

**Ms. Francine Lalonde (La Pointe-de-l'Île, BQ):** Thank you, Mr. Chairman. Thank you for your presentations.

My first question is for Mr. Hornsby. For us, members of Parliament, and particularly for myself as foreign affairs critic, it is quite an adventure to delve into the world of RADARSAT-2 and this extremely complex bill. In fact, I don't think this adventure is over yet.

I have several questions, of which this is the first. When I learned that the government was investing \$430 million and the company was investing \$92 million, I told myself it was impossible for the company to be the sole owner of this entire technology. However, after searching on the Internet, I discovered this statement by MDA: [English]

"In exchange for this investment MDA will own and operate...."

[Translation]

In the document, which goes back to 2000, that is at the time when the company was granted the contract, it was said that the government investment would be in the order of \$225 million and that the company would invest \$80 million. Given the amounts we learned about on Tuesday, and those which were made public when the contract was granted, we realize that the government's share nearly doubled, whereas the company's share probably reflected—I did not calculate this—the increase in the cost of living. I would therefore like to ask you why this is so.

Furthermore, Mr. Giroux, who was speaking on behalf of the Space Agency, told us that the technology had been developed by the agency. In fact, you got a very good deal. So I understand why the government would want to have some controls.

Something else also seems to have changed, and I would like you to confirm this. With RADARSAT-1, receiving stations transmitted data to companies which, then, sold the information and made their money that way. But now, based on my understanding, there is only a single receiving station left. If there are any others, I'd like to know. There used to be one in Gatineau and one in Saskatchewan. But now it's seems there is only one in Vancouver. The company receives the data. This means that, before, government technicians knew what information they should keep and what information went to the private company. I want to make sure I understand this correctly. So, if I am right, it would be hard to establish a way of controlling sensitive data.

I will briefly ask a few other questions, but I'd like you to answer these first and I don't want the chairman to cut me off.

The Chair: If you want to get answers, then continue now.

**Ms. Francine Lalonde:** In that case, I'll stop here and ask him to come back on the other issues later on.

The Chair: Please.

[English]

Would anyone like to answer, please?

Mr. Hornsby, you have a minute to answer.

Mr. John Hornsby: Okay. I'll try to answer these questions.

When the RADARSAT program started with RADARSAT-1, there was private industry involvement in terms of getting it off the ground. As part of that, RADARSAT International was actually formed, with the intent that this company would work to develop a commercial market—so the non-government use of the data. For that, in this current arrangement with RADARSAT-1, we then pay back a royalty to the government for doing that, and it goes essentially into paying the cost of operations and things like that.

With RADARSAT-2 the intent for the program was always to increase the amount of commercial involvement in the program. It's not dissimilar to what happened in the telecommunications industry where the initial satellites were entirely government funded, and today it's all completely privately run. Basically the intent was to increase the commercial involvement with RADARSAT-2. So with RADARSAT-2, rather than just a royalty back on sales, there was a clear financial commitment on the part of MDA, in this case, to invest a very significant amount in the program. There is on top of that, which turns out to be at least the same amount of money—

• (0955)

[Translation]

Ms. Francine Lalonde: How much? You mentioned a significant amount.

[English]

**Mr. John Hornsby:** There was the \$92 million you heard about the other day. That was just in terms of satellite construction. The other thing that has been taken on is the operation of the satellite, which, with RADARSAT-1,is currently done by CSA, and there's nominally another \$10 million a year in costs to operate the system. For the nominal seven-year life of a satellite, that's \$70 million.

The Chair: You need to close. Sorry about that.

[Translation]

Ms. Francine Lalonde: What about my other question?

[English]

The Chair: We'll come back to you, Madam Lalonde. I want to be fair

Mr. John Hornsby: I'll say it very quickly then. The two Canadian stations are in Gatineau, Quebec—in Cantley, more precisely—and then in Prince Albert. There are plans relative to national defence. I know there are plans for two more stations on both coasts in order to better service Canadian needs.

Then we have a network of stations around the world, about 18 of them now, which have the ability to directly receive. These are owned and operated by governments or companies around the world. There is essentially a network that exists around the world, and that's where some of the business is generated.

The Chair: Thank you.

We'll go to Ms. Phinney, please.

Ms. Beth Phinney (Hamilton Mountain, Lib.): Thank you.

I just have two short questions. I would like to know from the professor if she was ever consulted by the gentlemen writing up the bill in the department. I'd also like to know whether Mr. Hornsby and Mr. Last were able to express their concerns to the department about what was left out of the bill. Have you had your hearing with the gentlemen—I only saw gentlemen—writing the bill? Have you ever had a chance to express your concerns?

Mr. John Hornsby: Yes.

**Prof. Lucy M. Stojak:** No, I have not had contact. As someone who is interested in the field and wants to write papers, and does write papers, I tried to obtain information, but I was given a bare minimum amount of information about the bill itself. I got it off the Internet at the end of November.

**Ms. Beth Phinney:** Did you make any attempt to communicate with them to suggest any changes?

**Prof. Lucy M. Stojak:** No. I tried to obtain information, but because I didn't receive anything, I really didn't know what I was dealing with.

Ms. Beth Phinney: Mr. Hornsby.

**Mr. John Hornsby:** Yes, we've been involved in a number of consultations—over several years, actually.

Ms. Beth Phinney: But they didn't take your concerns into consideration?

**Mr. John Hornsby:** They took into consideration quite a few concerns we brought up through the process. As I mentioned earlier on, we had some very practical agreements we had to deal with right now, and that helped in formulating some of this. At the end of the process we still had some concerns, which I've outlined here, and they haven't been addressed to our satisfaction yet.

**Ms. Beth Phinney:** Do you think they'll be put into the regulations, or have you any indication of that?

Mr. John Hornsby: I think there's been quite a good job done in terms of separating out what should be regulations versus the legislation, primarily with respect to things that need to change over time, because obviously you don't want to be changing an act. I think there's been quite a good job done there, but there are some things that should be in the bill, which I've mentioned, and there are some things that, it was recognized, will be in the regulations, so there still needs to be some work done there.

Clearly, when it comes to the practical limitations, the regulations are really key for us at the end of the day. As Mr. Last said here, we really need to know precisely what we're dealing with in order to make the business work.

## **●** (1000)

**Ms. Beth Phinney:** You're not going to have much more of a chance to have the bill changed after this. This is it, so we need to know.

Mr. Last.

**Mr. Tom Last:** Two weeks ago I had a consultation with Foreign Affairs. It took me around three or four readings of the bill before I calmed down a little bit and realized it had an indirect impact upon the value-added service provider directly. They came down and discussed it.

Again, for us it's the regulations. The more black and white it is for us, the happier we are in doing what we do, and that's making money in the international market.

The Chair: Thank you, Ms. Phinney.

We'll go to Ms. McDonough.

Ms. Alexa McDonough (Halifax, NDP): Thank you, Mr. Chairman.

I want to say at the outset that what we're all doing here is trying to come up with legislation that is balanced, but I think it's also clear that two or three of the witnesses today are here because they're in the business of making money off this in some form.

As one member I am actually floored—and I would congratulate the witness for his candour in saying so—to have it said by Mr. Hornsby that he has had four years' worth of input into this legislation that has to do with his business, while legislators are now meeting for the first time to try to begin to understand what the implications are.

I say that not to be argumentative, but it's a frightening prospect to me that those who are in the business of making money from this have a four-year head start on shaping the legislation, so if we seem to be asking some stupid questions, we don't apologize for that.

I'm glad Ms. Stojak has raised the question about what international treaties, international obligations, apply here. Again, I find it troublesome that when we raised concerns about this on Tuesday, it was very much from the point of view of saying we need to know and understand fully what international obligations would be affected, because it's absolutely critically important that we meet those international obligations.

What I'm hearing from two of our witnesses is that it's a bloody nuisance, that they might be in the way of our making money, so we want to make sure they are going to be minimized. It may not be a completely accurate characterization, but you get the point.

I think it has also been confirmed that \$430 million of Canadian money has been spent to get us to where we are on this project. The company that now owns it has invested \$92 million.

Would it not be pretty basic to suggest, in view of the financial investment—never mind the international obligations we have—that it is absolutely, utterly, and totally appropriate that the Canadian government have major access, which would include shutter control, which would include...? And it was very helpful to have the suggestion made that we need to at least bring our legislation up to

the minimal standard of the American legislation, which ensures there is archiving.

I have a final brief question around the actual usage of RADARSAT-2. Could you give us an indication of what you would foresee as the general usage pattern? Some of us found it very surprising that there is almost no mention of environment—no provision for the ministry of the environment to have some shutter control, for example—when there is every indication that we have massive environmental challenges that beg for this kind of attention, and yet the weight of consideration seems to be on the side of the Minister of National Defence and the Minister of Foreign Affairs having a major intervention.

Could you give us some idea of what you actually foresee as the kind of usage of the different sectors in regard to this data?

The Chair: You must be quick.

Mr. John Hornsby: I'll be quick.

The environment is a key application area. The most recent example is with the tsunami in Asia; we provided a lot of data into that region.

**●** (1005)

**Ms. Alexa McDonough:** What kind of percentage breakdown would you see among the different usages?

**Mr. John Hornsby:** In terms of environment-related things—I mean, this is very rough—I would see 30% for mapping types of things.

Ms. Alexa McDonough: And defence?

**Mr. John Hornsby:** Defence is probably about 35%. The others are all mapping, agriculture, environment, that type of thing—just very rough numbers.

Let's be clear: with RADARSAT, the government actually gets all the data they require. That's part of their investment, a payback on the investment, so they get all the data they require.

I didn't write clearly enough here. Did you have another question?

**Ms. Alexa McDonough:** I'm just concerned about ensuring that the Canadian government has the kind of shutter control...for example, in cases where—

Mr. John Hornsby: Okay, I remember now.

Just as a very quick comment on that, I think a lot of this has to do with security-related matters. Maybe that's why the Minister of the Environment wasn't on there.

I think you paint us like we want to make money at all costs and wipe everything out, but that's not the case. All we're trying to understand is the boundaries within which we have to work, and then we can manage to them.

At the same time, there's a need to recognize that the boundaries that exist today aren't necessarily the ones that need to be in place tomorrow, because things change. Even the export restriction list changes over time because international relations change. What we basically don't understand is this broad international relations category. If there are treaties, that's fine, no problem.

The Chair: Mr. Hornsby, thank you.

That's it, Ms. McDonough.

We'll go now to Mr. McTeague.

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

Thank you, witnesses, for being here today. I have just two very short questions and maybe one observation.

The first would be to you, Ms. Stojak. I understand you had suggested the power of cabinet or the power of ministers to interrupt could be done—if I'm using your words correctly—willy-nilly.

Prof. Lucy M. Stojak: Not to be done.

**Hon. Dan McTeague:** You don't want it to be done. You've read clause 4, the application of the act, the circumstances and conditions. Do you feel it doesn't capture rather specific and defined methodologies or a rather rigorous test for the intervention that you are concerned about, that it not be done willy-nilly? Is there something you can tell the committee that gives you reason to doubt it is not strong enough?

**Prof. Lucy M. Stojak:** The comment was made within the context of putting on a commercial operator of a remote sensing satellite and remembering comments that were made by U.S. commercial operators when shutter control provisions were being introduced in the United States. Their concern was that the provisions would be too frequently invoked. Therefore, if you have too many interruptions of your service, your profit flow keeps getting cut off.

So my comment was not at all made to imply that shutter control is not something we have to live with. It was just to raise the concern that had been raised by industry in the United States and by the colleagues who had spoken before me.

**Hon. Dan McTeague:** Of course, we're trying to find a proper balance between necessary regulations for specific state and national interests, and of course the imperatives of the private sector.

I thought one point would have been very helpful for you and Mr. Last to discuss, because I thought it was very interesting.

In one of your comments, Mr. Last, I believe you cited a concern in conjunction with clause 14. I believe you went on to talk about the ability of the minister, and you said "the minister can interrupt and restrict access based upon other treaty agreements with foreign-governments". You are obviously concerned about the implications that would have for your industry.

We heard Ms. Stojak suggest that one had to make a distinction between raw data—which is what we're talking about here—and value-added data as two separate, distinct considerations. I'm wondering if you're satisfied with what Ms. Stojak has suggested, because if I'm correct, she has suggested to the committee that this does really deal with raw data and does not affect necessarily the commercial interests of your industry.

• (1010)

**Mr. Tom Last:** Not necessarily. In order for us to be successful, we need the raw data. If we have no data to work with, we can't provide a value-added service. It's just as simple as that.

In terms of shutter control within certain regions or areas of interest, whether it's for environmental or agricultural purposes or whatever, this is where the regulations are so critical to us in order for us to understand what kinds of foreign relations we are having down in South America, for example, and what kinds of changes have occurred. For the value-added service products that we provide, which are in direct relation to that raw data that we need in order to do our job, if we don't have it, we can't do the value-added service. It's as simple as that.

**Hon. Dan McTeague:** Do you care to comment on that one as well, Ms. Stojak?

**Prof. Lucy M. Stojak:** My comment on that would be the following. In the past, instances where you have had shutter control invoked were, for example, in the early 1990s—1991—during the Iraq war, in situations where clearly the operators of Spot Image, which is the French private sector remote sensing system, were asked not to transmit over geographical areas amongst the allies because there was a coalition. I believe I'm right—I'd have to double-check, but I think I'm right—in saying that based on the current U.S. legislation, shutter control has not been requested.

What has happened is when you had the second Iraqi invasion, because of the sheer financial power of agencies like NIMA, they were able to amass, by millions of dollars per month, all of the data provided by one of their commercial operators, Ikonos. In other words, it was a financial shutter control that was imposed. It wasn't, "We will ask you please not to take pictures over this area". It was, "You continue doing business, but we want all of the data over this area; here is *x* number of millions per month for *x* number of months to obtain the same result", which was basically not to diffuse the information amongst non-desirables.

The Chair: Thank you.

Now we'll pass to Ms. Stronach.

**Ms. Belinda Stronach (Newmarket—Aurora, CPC):** First of all, thank you for your presentation. I echo my colleague's sentiments. This is a very complex subject matter but a very important one. I guess the challenge we have is to wrestle with how to allow for a healthy economy to be there but also to make sure we look at what is in our national and security interests. It is a very complex subject and involves complex technology. I'm sure it's continuously changing, so I'm going to ask slightly more broadbased questions so that I get a better appreciation for this subject matter.

You've talked about international treaties. I'd like to understand better the overall governance structure that controls or tries to regulate this issue. I'll just list a few questions and then you can pick and choose.

How does our proposed legislation differ from or compare with that of the United States? What about China, Japan, Russia, other nations? How do we ensure that other nations with the same technology capability behave responsibly and don't use the technology for, let's say, harmful purposes? What legislation governs, or is there legislation that looks at, reviews, regulates the sale of companies or technology or patents? How is that regulated? The technology itself is of interest to me.

The Chair: Ms. Stojak.

**Ms. Belinda Stronach:** It's a broad question, but it's to give comfort to us as parliamentarians that we're doing what's right in our national interest from a balanced standpoint, but that our national security interests are also given proper consideration.

**Prof. Lucy M. Stojak:** Okay. I think your first question was on the broad picture treaty obligations. Again, I think the main point to remember is the Magna Carta, as it's referred to, at the international space law level is something called the Outer Space Treaty. It provides a skeleton of principles that are to guide the activities of states. Only states are signatory to the treaty, so Canada is a signatory to the treaty.

One of its provisions, article VI, states that you can have governmental space activities and you can have private sector space activities. For the private sector space activities, the state of incorporation of the company—

**●** (1015)

Ms. Belinda Stronach: Which states? How many?

**Prof. Lucy M. Stojak:** Almost 100 countries have signed and ratified the Outer Space Treaty. All of the major space powers have ratified it. Anyone who is operating in space is a signatory. So the important criterion to remember in terms of private sector operators is that because Canada is a signatory, Canada is responsible to supervise and have an overview as to what its private sector industry does, and the easiest and most commonly used way is to have legislation and licensing and regulating. In our case I would say that —not just in our case but for a country that does have commercial activities—I think it is important to have national legislation to make sure Canada meets that obligation.

One of the second points you raised, not necessarily in the order you raised them, was about the sale of companies. I believe that in the—

Ms. Belinda Stronach: Or technology or patents.

**Prof. Lucy M. Stojak:** Yes. In the current draft in front of us there is provision that should a remote sensing operator want to transfer ownership, prior approval needs to be sought from the minister, because obviously there are national security issues and substantial ownership types of issues. But I think this is built in to one of the sections. I just don't remember which one.

**Ms. Belinda Stronach:** I'm sorry to interrupt, but is the intent of that legislation also reflected in the overall international space treaty?

**Prof. Lucy M. Stojak:** No. The treaty is, as I mentioned, a set of broad-scale international principles. A country with specific activities it wants to address can incorporate them in national legislation on an as needed basis. You also asked what the legislation is like in other countries.

At present, even if there are a lot of actors—countries where there is remote sensing activity—not that many have legislation. Again, I keep mentioning the U.S. simply because of the size of its space sector. France is struggling with enacting legislation and drafting something. Germany is looking at drafting legislation. Japan and China are as well. There are not that many countries who currently have legislation.

**Ms. Belinda Stronach:** What would prevent Mr. Hornsby's company from moving to another country that doesn't have this legislation?

**Prof. Lucy M. Stojak:** The control of the state will kick in; there will always be that.

Ms. Belinda Stronach: There isn't unanimity among states in terms of legislation.

**Prof. Lucy M. Stojak:** No, and that's an issue. There probably ought to be because within the next ten years there will be more countries with legislation. There should be an attempt among the countries who are active to harmonize the legislation so that there aren't 60,000 different criteria applicable around the world for the same type of technology.

Ms. Belinda Stronach: Thank you very much.

The Chair: We will now go to Mr. MacAulay and then to Monsieur Paquette.

Hon. Lawrence MacAulay (Cardigan, Lib.): Mr. Chair, I'd like to continue on with Belinda Stronach's statement about countries that do not have the legislation. Mr. Hornsby and Mr. Last seem to have a concern about the minister's level of control and a number of other things, but if they decided, let's say, that they wanted to shift to another country that had fewer controls, what would stop them from going to that country?

I have a number of other things I would like to ask you, Professor.

**●** (1020)

Prof. Lucy M. Stojak: Lucky me.

Hon. Lawrence MacAulay: There's encrypted data and that type of thing. I would wonder why we would have encrypted data in this system when it's supposed to be so well controlled in the first place. Why do we need encrypted data when in fact we're supposed to have complete control of what information is passed on, whether it's private sector or government? I certainly know what the value of the encrypted data is.

Also, do you feel we should have something in the regulations to indicate information that should be destroyed? I know the systems have to be destroyed, but should the information have to be destroyed after a number of months or years, or should it be put in the archives? Adding onto that of course, if it's something that's very important to the country, then it could be taken by the country and put into the archives, but should the company itself be able to store this information?

There are a lot of things I don't know about this. There are many other things, too, such as our legislation as it compares to other legislation, which you'll deal with when you answer my first question.

Mr. Hornsby or Mr. Last could answer this. Does our legislation inhibit you, compared to the legislation in other countries that might not be as stringent as ours? I might add that I'm glad you're involved for the four years. I can be a socialist and a capitalist, but I believe you have to make money.

Mr. John Hornsby: I'll try to touch on encryption in terms of the control of satellites.

Hon. Lawrence MacAulay: There's not encryption of the information itself.

**Mr. John Hornsby:** No. There is encryption on the downlink as well. Currently with RADARSAT-1 there is no encryption, and someone can potentially pirate the data because it's just broadcast fairly broadly. This is in order to control that.

Hon. Lawrence MacAulay: Would RADARSAT-2 have encryption on all information?

**Mr. John Hornsby:** Yes. It's really a control of the data and the satellite. In terms of the question of inhibiting our business, yes, some countries are very non-restrictive. The Israeli satellite, for instance, is very non-restrictive. We recognize that there have to be controls here.

**Hon. Lawrence MacAulay:** Why wouldn't we go there instead of staying here?

**Mr. John Hornsby:** For one thing, this is a Canadian program and we're partners with the government here, so it would be very difficult for us to do that. I don't remember all the words in here, but even if we completely funded a satellite at 100%, the fact that we're a Canadian entity I think somehow ties us back to where the control is. So I don't think that's really an issue there.

As for the whole inhibit business, it really comes down to the regulations. So what are the specific regulations that are placed on the distribution, for example, of RADARSAT-2 data? We know that certain organizations, certain countries, will not be able to get certain types of data—and that's fine. All we want to do is make sure that if things become less restrictive with other programs around the world, this will change with that so that we can maintain the competitiveness, because it has changed dramatically over time. If you look at what we refer to as the optical senses on radar, it used to be that you couldn't get anything less than 10 metres, and now they're down to 60 centimetres being commercially available. So a number of years ago it would have been unheard of for that to have been available, but it's now commonly built in the commercial marketplace.

Hon. Lawrence MacAulay: And you're going to be more advanced as time goes on; you'll soon be able to read number plates.

**Mr. John Hornsby:** Well, no, that's going a bit far. It doesn't go that far.

The Chair: Thank you.

Now we'll go to Monsieur Paquette, s'il vous plaît.

[Translation]

Mr. Pierre Paquette (Joliette, BQ): Thank you, Mr. Chairman.

Thank you for your presentations. I would like to come back to the issues raised by Ms. Lalonde previously, because we did not have time to resolve the issue.

Obviously, with Bill C-25, we are beginning to better understand what remote sensing in space is all about. As Ms. Lalonde said, we are a little surprised at the kind of private-public partnership which took place with regard to RADARSAT-2.

I would like to know how much money RADARSAT-1 is making now. On Tuesday, Mr. Giroux told us that it had about 600 clients throughout the world. Given the significant number of clients, I would like to know how much money RADARSAT-1 makes by selling images.

[English]

The Chair: It's up to you if you want to answer for your private company.

**Mr. John Hornsby:** I can't reel numbers off the top of my head here. I mean—

[Translation]

Mr. Pierre Paquette: Give me a rough idea of how much we are talking about. The federal government has invested \$430 million in this project and claims that it will recuperate this investment by means of the images that RADARSAT-2 will transmit to the government and its departments. I am wondering if this is a good deal or if, in fact, it is nothing more than a fairly generous subsidy to MDA.

[English]

**Mr. John Hornsby:** As far as the government's use of the satellite is concerned, they're just going through their own study in terms of the volumes that are required. Clearly, just between organizations like the Canadian Ice Service, which uses a large number of scenes every year for monitoring the ice and navigation in the north, and certainly DND and its plans for monitoring the coastlines of Canada, the expectation is that they're going to be using a very high percentage of the allocation they've basically pre-brought relative to RADARSAT-2. So there's a very large demand there.

I'm not prepared at this point to go into all of our business numbers because I'm not sure it's really relevant, but suffice it to say there's certainly a large amount of data that the Canadian government has acquired, and all indications from some of the key ministries are that they will be using that.

**●** (1025)

[Translation]

**Mr. Pierre Paquette:** I would imagine that one of the reasons governing the government's decision to invest so much money in this project is that it will bring about considerable economic and technological impact for the Canadian economy as a whole. With that in mind, I would like you to comment on Mr. Last's proposal that the list of persons or classes of persons be available to the entire sector, as opposed of only being available to the licensee.

In his brief, Mr. Last makes the following remarks about section 8:

From my perspective, not having access to a list of persons or group of persons would limit my ability to determine who we could or could not provide data products to as a part of a value-added package.

[English]

The Chair: Mr. Hornsby.

Mr. John Hornsby: There are two parts to answer that.

One, certainly if you compare the U.S. operators, there are two high-resolution operators of optical satellites. Along with their licence for the data, they provide a complete list, which originates from the government in the U.S., of all the organizations you cannot sell data to. These are typically terrorist types of organizations and so on. It's dealt with up front. I think part of your last comment is that we need to be able to see that, and it needs to be transparent and passed down.

The other aspect is knowing who the end customers are. Obviously, there's a sensitivity when we're providing data to the value-added companies. They're obviously concerned that I have visibility into their customers. What we're trying to do, in the way it's set up, is make sure the licence he receives has all the rules and regulations that we have to adhere to and that it gets passed down to all the levels.

[Translation]

Mr. Pierre Paquette: Perhaps Mr. Last has some additional comments to make.

[English]

**Mr. Tom Last:** In regard to the listing, one of the biggest problems we always have is the value-added service. We have to understand that we also compete against RADARSAT International in terms of value-added services at times. Many times we don't necessarily want to submit who the end user is to RADARSAT International, in the sense that we don't want to submit the name of the end user simply because there's a competitive thing going on.

It's my belief that in order to abide by the rules and regulations of this bill, if we had direct access from the Government of Canada, where the Government of Canada is responsible for this list and for the dissemination of this information, either through a website or whatever, for any value-added company within the remote sensing industry, we can secure and ensure everything according to the rules.

That's what I'm getting at, not taking that responsibility and placing it upon RSI. This is what I'm trying to get at.

The Chair: Thank you.

Now we'll go to a question from Mr. MacAulay.

Hon. Lawrence MacAulay: Again, on supplying the list, Mr. Hornsby, being Solicitor General for a few years, I'm aware of how quickly governments provide lists and that type of thing on how far you go. I think it would be a major problem if you were to provide the list. There are a number of groups that everybody would know should be on it, and there are a number of countries or groups that because of security reasons should not be on it.

I would have a great concern. You have a great presentation, but I'm concerned about that.

You indicated, Mr. Last, that you want the list, if I understood you correctly, so that you won't have to provide the name of the end user publicly.

Mr. Tom Last: No, it's not publicly, but to RADARSAT International.

Let me give you an example. I'm a reseller for Space Imaging in the United States. Under the rules and regulations that I have to abide by, even though I'm a Canadian company, I have to sign this document saying I will not export this product to particular countries or individuals. Space Imaging in turn sends me a CD, and on that CD are a series of PDF files with a whole series of names of personnel, whether they're terrorists, terrorist organizations or countries. I have to abide by those rules. I'm not allowed to sell to these particular organizations or the persons or groups of persons. But I'm saying that I don't consider Space Imaging a direct competitor to me because I'm value-added and they only provide product.

What is of concern is if you are placing the responsibility upon the licensee, in this case RADARSAT International, for RADARSAT-2, that information is then channeled through RSI. In order for me to put in a request for imaging over a particular area of interest around the world, as part of a turnkey solution package of value-added for a client, I have no choice but to tell them. This is where it gets into a grey area for us in the commercial sector. Competitive information is then being transferred over to our side. It's a double-edged sword. This is the concern.

In order to avoid this, I'm recommending that it's the responsibility of the Government of Canada to have that information available, whether or not it's through a secure website, for any value-added service provider who wishes to go and buy the imagery.

(1030)

Hon. Lawrence MacAulay: Would that be public information also?

Mr. Tom Last: Would it be public? Absolutely.

Hon. Lawrence MacAulay: Well, I would say good luck.

Mr. Tom Last: This is the problem. Hon. Lawrence MacAulay: Yes.

Professor Stojak, you mentioned in your presentation that there was imagery taking in the Iraq war. Did I understand you correctly that it was company-owned...that one certain company bought this imagery and it was worth a lot of money and it more or less kept other companies out of obtaining that information? Did I understand that correctly?

Prof. Lucy M. Stojak: Not exactly.

Hon. Lawrence MacAulay: I'm not surprised.

**Prof. Lucy M. Stojak:** I mentioned that a couple of years ago, in the second Iraqi invasion, there was a private operator in the United States called Ikonos that provides very fine resolution. Within the United States government they have created an agency called NIMA. It stands for the National Imagery and Mapping Agency. They have the authority to be able to basically buy images that the United States government feels will help and support its military.

Hon. Lawrence MacAulay: Is that a government agency itself?

**Prof. Lucy M. Stojak:** NIMA is a government agency; Ikonos is private. Ikonos had the images that were most pertinent and relevant to what the United States government needed, so it bought in bulk for *x* millions of dollars for consecutive months all the images Ikonos produced over a given geographical area.

Hon. Lawrence MacAulay: Was that using shutter control, or was—

**Prof. Lucy M. Stojak:** It was using financial shutter control. It did not tell them to shut off just those features and don't disseminate—

Hon. Lawrence MacAulay: Just financial shutter control.

**Prof. Lucy M. Stojak:** —but they basically achieved the same goal.

• (1035)

Ms. Beth Phinney: Couldn't they make a copy?

**Hon.** Lawrence MacAulay: I don't know if I understand it correctly. You tell me there's a government agency buying from the private sector, but wouldn't the government agency be able to use shutter control if the government decided it wanted this, or was the government agency using this for a profit also?

**Prof. Lucy M. Stojak:** No, the government agency was not using it for a profit. If you read the U.S. legislation, there was a new policy passed last year, specifically on remote sensing, to the effect that the United States government is to rely more and more on the U.S. private sector to provide for the needs it has in terms of remote sensing. The policy also says it could also go to foreign providers, and I'm sure people from RADARSAT hope they will get such contracts.

So it's not for profit. It's just that the government in the United States—and it's a very specific issue to the United States—has decided it wants to pull out some of its money and put it into high intelligence military satellites. Freeing that money provides almost a guaranteed source of revenue to its industry, and they see that as a complementary means of obtaining all of the information at any given time that they need to support their forces.

**Hon. Lawrence MacAulay:** They're buying raw data, aren't they, instead of value-added data?

**Prof. Lucy M. Stojak:** But they have among the best processing facilities, so that's all they need. All you need is the raw data to be able to read into it.

Ms. Beth Phinney: Does Cheney own that company?

The Chair: Thank you.

We'll go to Madam McDonough, please.

Ms. Alexa McDonough: Thank you, Mr. Chair.

RADARSAT International at the moment is a Canadian company, a subsidiary. On Tuesday, government officials indicated that in the process of moving from RADARSAT-1 to RADARSAT-2, the previous company was sold to American interests and then bought back. Was that accurate understanding on our part? Second, what protects Canada's investments and the interests of Canadians, in the public interest sense, against the possible sale of RADARSAT-2?

I have a second question. In the shift from a publicly owned, publicly operated RADARSAT system to private company, obviously you must be involved in hiring personnel, as you are up here. Have you already hired personnel from the Canadian Space Agency? If so, how many? Second, would you anticipate hiring more from the Canadian space industry?

Third, it was clearly stated by at least two of the witnesses that the concerns about possible implications for Canadian participation in missile defence were irrelevant, and in fact I believe you indicated, Mr. Hornsby, that you didn't really know much about missile defence, but concerns have been raised by a number of persons around the increasing problems of debris for existing and future satellites. Would you see no implications from the implementation of missile defence, whether Canada is a participant or not, for possibly increasing the debris problem, which is hazardous to the successful operation of satellites?

Finally, if you could indicate—

**The Chair:** Ms. McDonough, you'd better wind it up if you want them to answer all your questions. It's up to you.

**Ms. Alexa McDonough:** Finally, if you could indicate, perhaps in writing, I would be interested in knowing more about the Institute of Air and Space Law, what the terms of reference are, what the sources and amounts of funding are for the operation, and whether the institute is doing contract work for the Canadian government or any commercial interests.

**Mr. John Hornsby:** Our parent company, MDA, had at one time been sold to a U.S. company, and now it is back as a fully traded Canadian company.

It is my understanding that, certainly with our agreements that pertain to RADARSAT, and so on, there is a requirement for government approval if there are changes in ownership, and so on. So the government has control in there.

Relative to CSA, we have discussions ongoing where, particularly in the area of satellite operations, a lot of the people who are operating RADARSAT-1 right now are actually contracted by CSA. So we would take on those contracts with a private company, another private company, in Canada. We would take those on, and then to the extent that we needed some of the help of the CSA personnel, we would also pay for that service.

In terms of missile defence and its debris, debris is always a concern in space. Again, I will come back and say I really don't know much about this missile defence stuff or the connection here. Suffice to say, all debris that is up there is tracked very precisely. When satellites are placed in orbit, that is one of the considerations, where this debris is, because it does not take much to put one out of service. So as I said, every little piece that is up there is tracked pretty much.

The Chair: Thank you.

Now we will go to Mr. Menzies, please.

**Mr. Ted Menzies (Macleod, CPC):** First of all, I guess I should make sure that our witnesses recognize the fact that not all of us think "profit" is a dirty word. I realize, and I think most people around this table do, that businesses pay the taxes in this country and provide all the services. I just want that out in public.

I want to go back a bit to this Outer Space Treaty. I have some questions as to how this works.

There are devious people out there who will try to steal images. Is the encryption that we have in this system adequate? We have computer hackers out there who seem to be able to circumvent any sort of system we have in place. Is this system foolproof? I have one other comment, probably for Mr. Hornsby. You raised some concerns about lost revenue because of suspensions. What would cause a suspension?

**●** (1040)

**Mr. John Hornsby:** On the business of the encryption, speaking relative to RADARSAT-2, I think CRC is the agency within the government that deals with these kinds of things. They were very heavily involved in evaluating what level of encryption would be required to do that. I am not an expert in that area.

On that basis—and there was a lot of work put into that—I have to believe it is at the appropriate level for what we are trying to deal with, and there are different levels of encryption. As I said, this agency within the government was heavily involved in defining that. As to whether it is foolproof, as I said, I am not an expert in that area, so I really can't comment.

Your second question had to do with....

**Mr. Ted Menzies:** What would constitute a suspension of service, or what would cause a suspension?

**Mr. John Hornsby:** If I can, I'll answer in two parts. One, we know there are going to be restrictions in the regulations on who can get certain data. In that regard, we need to just make sure the regulations are not overly restrictive compared to what's being done in the rest of the world.

In terms of invoking the shutter control, normally it's a national security kind of interest. As a colleague here has said, to my knowledge it has never actually been invoked over the years that have gone on. Certainly in the U.S., it was done indirectly in this Gulf War example.

The concern is when it goes beyond there. Where there's priority invoked and shutter control, obviously we can't generate business for reasons that fall under this international relations category, which is extremely vague. If they're treaties and so on, fine, they're in place, but it's this whole other area that's a bit of an unknown, which really gives us a lot of concern.

**Mr. Ted Menzies:** Just as a quick follow-up on that, what role can and should Canada be playing in harmonization of this? Maybe I'm dwelling too much on the international aspect of this Outer Space Treaty, but not all countries play by the rules.

I don't know if anybody wants to answer.

**Mr. John Hornsby:** In some ways, countries are catching up and putting this kind of legislation in place, because the technology.... We have businesses that are launching these satellites and countries are saying, "Hang on a second, we have to deal with this".

Of the examples that were given, certainly in Germany there's a radar satellite going up called TerraSAR, which has one-metre imaging capability. There's no legislation in place to govern that, so the Germans are actively looking to deal with that. So it's on the list; it's on a lot of government agendas to put this kind of legislation in place. Granted, different countries will have different rules and regulations.

The Chair: Thank you.

Professor Stojak.

• (1045)

**Prof. Lucy M. Stojak:** Just as a quick point about this treaty that seems to be haunting several of you, because the private sector in countries around the world is getting more and more involved in space activities, you need the national legislation to provide the safety net for the government to ensure that its private sector is following the international treaty obligations. I think it's a normal development, and you're going to see more and more national legislation being adopted. Again, the important point would be that those pieces of legislation somehow be harmonized on a given issue, if possible.

The Chair: Thank you for this clarification.

Now we'll go to Madame Lalonde for one question, without preamble.

[Translation]

**Ms. Francine Lalonde:** Mr. Hornsby, in the first part of your brief, you threatened to cancel further investment unless the concepts of "international relations", and "international obligations" are clearly defined. Yet, these concepts cannot be defined in an extremely precise manner, and the government cannot abandon its international obligations. Are you threatening us to abandon RADARSAT-2?

[English]

**Mr. John Hornsby:** "Threaten" is a rather strong word. As we've presented, these are all things we have concerns about and would like to have addressed. Even without the legislation, we're operating now such that we're ultimately controlled by the government with RADARSAT-1 if there's a national security issue.

It's not just me, but my colleague here. We just need to know what the rules are that we're working under, particularly as the amount of investment goes up in these programs. There's a lot at stake.

Yes, maybe it's difficult to define, but actually all we're asking is that it be included in the definitions to which it refers. Treaties or international relations could include...I don't know what. That's the question.

**The Chair:** The last question, from Mr. McTeague, is a follow-up to Madame Lalonde's.

Hon. Dan McTeague: It is a follow-up on Madame Lalonde's question.

Mr. Hornsby, you have suggested here what I think was a concern, but also potentially a definition. I am just wondering if you and Mr. Last can maybe have a caucus of your own. You had suggested that the definition you were concerned about, and I am looking at it, was international obligations, which Madame Lalonde has just talked about. You then went on to suggest that the definition may be better defined as "for issues of national security, the defence of Canada,the safety of Canadian Forces and in support of Canada's international treaty obligations". That's on page 3 of your submission, the second paragraph.

I am wondering if Mr. Last can have a look at that and the two of you can talk about that being a potentially broader, more all-encompassing definition that might satisfy ultimately both of your concerns.

It doesn't need to be done today, but it would be awfully nice if you said, "Yes, that's not a bad idea." You seem to suggest that's not a bad idea because you've written it. I just want to see if Mr. Last can come on board.

**Mr. Tom Last:** Sure, absolutely. As far as I am concerned, the defence of Canada and the security of Canada should always come first. There should be no question about that.

Hon. Dan McTeague: I think we were concerned about the ambiguity of the term.

**Mr. Tom Last:** And the ambiguity of the international obligations. What does it mean? What does it mean to me?

Hon. Dan McTeague: I'm asking you, would you accept that definition?

Mr. Tom Last: Would I accept that definition?

Hon. Dan McTeague: Yes.

**Mr. Tom Last:** Again, I would accept the fact that you are putting the national interest of Canada first before international obligations because simply what obligations are we talking about?

Hon. Dan McTeague: International treaty obligations.

**Mr. Tom Last:** If we are talking about treaty obligations, if they're specified and so forth, which are fully available to anybody, yes, absolutely.

**Hon. Dan McTeague:** They would be well known by your industry, I would suspect, given the breadth and width of your experiences.

**Mr. Tom Last:** Yes, but having broad statements and open-ended statements in that where a minister has individual authority....

**Hon. Dan McTeague:** That's very helpful, both your rejoinder as well as Mr. Hornsby's suggestion here. It would be very helpful for the committee. Thank you.

**Prof. Lucy M. Stojak:** I have a quick point on the wording you have suggested, "international treaty obligations".

What would happen if you have an embargo against a group of countries or a country because of a certain geopolitical situation at point X in time that's not in any treaty, but it could be an international obligation that could be detrimental to Canada? That's just a caveat.

**●** (1050)

Hon. Dan McTeague: Well, that would be captured by issues of national security, the defence of Canada, the safety of Canadian forces

The Chair: Thank you.

Just before closing, I want to mention something to our witnesses this morning. Professor Stojak indicated that there are several elements missing from the legislation and pointed to the requirements for data and archives to be maintained in the U.S. legislation. Mr. Hornsby pointed out that there is no provision for consultation with the minister on the part of licensed applicants. He also pointed out that there should be an obligation on the minister to respond to a representation within a reasonable timeframe.

I just want to let you know that if you have any specific amendments there is still time left this morning to propose them to the committee and we will look at them. I just want to let you know about this.

I want to thank you. I am going to ask my colleagues to remain and there will be some motions after that.

[Translation]

Thank you very much to having agreed to come along this morning. It was very enjoyable, and very enlightening, for all the members of the committee.

• (1051) (Pause)

**●** (1056)

**The Chair:** Let us resume our meeting. We are now going to turn our attention to committee business. CIDA has requested that the Executive Director of UNICEF appear before the committee on the 15 of February 2005.

[English]

Are there any comments?

[Translation]

**Ms. Francine Lalonde:** What is on our schedule for next week, Mr. Chairman? I am just asking because I will be away with minister Pettigrew. I would like to know what will be happening.

**The Chair:** On Tuesday the 8 of February, the Executive Director of the Global Fund to fight AIDS, Tuberculose and Malaria will be here between 9:00 and 10:00 a.m. Then, from 10:00 a.m. to mid-day, the Subcommittee on Agenda and Procedure will meet to plan the international policy study. That is what we have on the program at the moment.

On Thursday, we will possibly undertake a clause-by-clause consideration of Bill C-25.

Ms. Francine Lalonde: Could we come back to that?

**The Chair:** Yes, of course. As I said, the subcommittee will be holding a meeting on Tuesday, and we will be asking you what is in the pipeline.

**Ms. Francine Lalonde:** I do not think we are ready for clause-by-clause consideration of Bill C-25. We expect more witnesses.

The Chair: Very well, we will come back to this point.

CIDA has requested that we hear from the Executive Director of UNICEF on Tuesday the 15 of February. Is everyone in agreement?

Voices: Agreed.

The Chair: Now, at the last meeting, which I did not attend, you moved a motion.

[English]

**Ms. Belinda Stronach:** UNICEF? I thought you said UNESCO. I apologize.

The Chair: At the last meeting last Tuesday Mr. Menzies moved that pursuant to Standing Order 108(2) the committee examine Canada's capability to respond to international humanitarian disasters and that the responsible minister, as well as other appropriate witnesses, be invited.

There was a debate and there was unanimous consent that a motion would be withdrawn, and it was agreed that Mr. McTeague and Mr. Menzies would have a motion for this current meeting. Now the motion is there in front of you. We would like to discuss this motion.

[Translation]

Ms. Lalonde.

**Ms. Francine Lalonde:** I suggested, and it was accepted, that we add the words "in particular, by means of its consular services" after the words "as well as Canada's capability". Thus, the text would read as follows: "...as well as Canada's capability, in particular through its consular services, to respond to international humanitarian catastrophes...". I included that because we are all aware of what people went through. We are not seeking to blame anyone, but, rather, to improve things.

**Hon. Dan McTeague:** That is absolutely fine. I apologize, Ms. Lalonde. I was just trying to keep in mind Ms. McDonough's suggestions. I was going to suggest that we include the following after the next paragraph:

[English]

"Canada's role in promoting peace and security in the affected regions and its consular services".

[Translation]

However, I forgot to do so, and I apologize. I have absolutely no problem with your proposed text. But Mr. Menzies also has to accept the change.

[English]

**The Chair:** Do you agree with the change, Mr. Menzies, because you were the proposer also?

**(1100)** 

Mr. Ted Menzies: Yes.

The Chair: Fine.

Ms. Beth Phinney: I don't understand.

The Chair: You don't understand. I'm going to read it for you:

That, pursuant to Standing Order 108(2), the Committee, in light of the tsunami disaster in Asia, examine Canada's role in promoting peace and security in the affected regions, as well as Canada's capability—

**Ms. Beth Phinney:** What are you adding in there? That's not what it says on mine.

The Chair: We're just adding after Canada, "capability through".

Ms. Beth Phinney: "As Canada", you can't stop there. You have to say "Canada's".

**Hon. Dan McTeague:** I'm wondering if it might not be helpful, with Madame Lalonde's consent, that the English version, rather than talk about "embassy", would say the "consular services".

[Translation]

Would the following French version be acceptable to you: "That, pursuant to Standing Order 108(2), the committee, in light of the tsunami disaster in Asia, examines Canada's role in promoting peace and security in the affected regions, and its consular services, as well as Canada's capability to respond to international humanitarian

catastrophes..."? It is a matter of placing the onus on examining the role of consular services in the event of a tsunami or other catastrophes.

**Ms. Francine Lalonde:** We cannot insert those words straight after "in the affected regions"; that does not make any sense.

**The Chair:** No, it does not, it would perhaps be better to say "in the affected regions, as well as Canada's capability, including through its consular services".

Ms. Francine Lalonde: That is fine by me.

The Chair: It would be after the word "Canada".

[English]

**The Chair:** That's fine. You have the translation in English through the translator.

All agreed?

**Mr. Ted Menzies:** As long as we're not highlighting just consular service itself.

**The Chair:** No, we're not highlighting...including. That's not the purpose of the motion.

**Ms. Beth Phinney:** Mr. Chair, you are going to have to add "and", or something like that, if you want to oblige them. We have "respective regions through its consular services". You have to say "and through its consular services". You have to put in that you're discussing both—our government here, and....

**The Chair:** Instead of saying *notamment*, we'll say "including". [*Translation*]

It would be "including consular services".

[English]

It would be "including consular services".

Ms. Beth Phinney: It should be "including through".

The Chair: Yes.

The idea is to discuss this matter.

[Translation]

**Ms. Francine Lalonde:** It is a similar idea, but "notamment" means "in particular".

[English]

The Chair: Okay. It's fine with "including".

(Motion as amended agreed to [See Minutes of Proceedings])

**The Chair:** We also have a notice of motion from Madam McDonough.

We have another 10 minutes. We can pass the time or we can go until 11:15.

Ms. McDonough, you have a motion.

**Ms. Alexa McDonough:** Can it be distributed, because people will be frustrated if they...?

**The Chair:** We have our 11th report, and we're going to pass you the motion that the committee passed previously concerning this matter.

Ms. McDonough, is it the same motion you already passed?

**Ms. Alexa McDonough:** It has most of the same provisions, but it's really updated for subsequent events. There are three new sections proposed.

If you come down to, "Agrees with the April 13, 2002 decision of the Eritrea-Ethiopia Boundary Commission to grant the disputed town of Badme to Eritrea", that's a modification, an update.

Second, there's a new section that reads:

Concerned that the destruction during the war, the current stalemate in the peace process, and the cumulative effects of drought have dealt a serious blow to the Eritrean economy, reducing that country's capacity to cover food requirements through imports.

And "Recognizes the efforts of Lloyd Axworthy, the UN Special Envoy to the Horn of Africa" is new.

And finally, there's the final clause: "Suggests that the government of Canada offer assistance under UN auspices, to the governments of Eritrea and Ethiopia to help in the demobilization of their respective armies".

I think everybody is mindful of the context because an earlier motion was passed by the committee. What we're dealing with here is a genuine stalemate. It seems as though there is at this point no progress toward the implementation of the border dispute resolution that was achieved.

Actually, I haven't had a chance to talk with Francine Lalonde about this, but one suggestion she made very briefly was that we might want to hear from Lloyd Axworthy on this if it was felt by the committee that it would be useful. He, in fact, has been appointed to serve in the role of peace envoy by the United Nations in trying to help bring about a satisfactory resolution.

• (1105)

**The Chair:** I'll hear from Madame Lalonde, *puis Monsieur McTeague*.

Mr. Kevin Sorenson: We aren't voting on this today, are we?

**The Chair:** No. We're going to hear from Madame Lalonde. I would suggest that we're not going to vote.

We'll ask Mr. Axworthy, because the people we met from both sides, from Eritrea and Ethiopia, who came in front of us, lobbied us months and months ago. They have been coming on a regular basis.

I think it would be good if we could have Mr. Axworthy come in, since he was a special envoy for Kofi Annan. After that, we could have a resolution to pass a motion, yes or no. I think Madame Lalonde's suggestion that Ms. McDonough just pinpointed, to call Mr. Axworthy to appear in front of the committee, is a good one. We'll get much more from someone who is independent, from one who is a special envoy.

Do we agree on this?

**Mr. Kevin Sorenson:** Do we agree on what? We are voting on this today.

The Chair: No, we are not going to vote on this today, I don't think.

Mr. Kevin Sorenson: So this is just a notice of motion?

**The Chair:** No, it's a motion. Notice of motion was given with the 24 hours' delay.

**Ms. Beth Phinney:** So what you're asking is if we agree that Mr. Axworthy come.

The Chair: Yes.

Ms. Beth Phinney: That's fine.

[Translation]

The Chair: Ms. Lalonde, the floor is yours.

**Ms. Francine Lalonde:** I am very concerned with the situation in Erytrea. After having made a commitment to accept the recommendations of the person or the group tasked with demarcating the border, Ethiopia has now decided not to accept them.

This is a serious situation. Before we adopt this motion, I want to make sure that it will be useful in helping us move toward a solution. That is why I would like to hear from Mr. Axworthy.

The Chair: Mr. McTeague.

[English]

**Hon. Dan McTeague:** I leave it to the wisdom of the committee to do this. I thank Ms. McDonough for bringing forth the motion, and of course the interventions by Madame Lalonde.

I wanted to put a few things from the department's perspective into play for committee members as we embark upon a decision, limited as it may be for now, with Mr. Axworthy.

There are a couple of things. By accepting this motion to tie our aid to observation in respect of one party, Ethiopia, to the border issue, it would obviously isolate us with every one of our other bilateral partners as it relates to this. We're concerned on the Eritrean side, Mr. Chairman, that Eritrea has not accepted an invitation from Lloyd Axworthy to visit, and therefore it would be very important that the UN envoy at least have an opportunity to be in Eritrea to be able to assess their side.

From a Canadian perspective, I think we are also concerned about the development issue in Ethiopia. As all colleagues know here from so many times, we have to strive to assure that we attain food security in Ethiopia regardless of and quite apart from the border issue. Currently that cycle of humanitarian appeals that goes on costs Canadian taxpayers \$40 million a year, and the number is not considered to be falling. If we suddenly stop aid and development, the consequences could be substantial. So at this stage I think it might even be counterproductive to go as far as to say we're going to use our development aid as a weapon.

In the case of Eritrea, they are not in a position...they do not meet the requirements of CIDA. CIDA is not able to give money or help to Eritrea because it has not satisfied their requirements, human rights and others, whereas Ethiopia is the extreme opposite. So we're dealing with some incentives, of course, which is part of the motion. Before we go down that road, I want to make sure that we are indeed committed to long-term negotiation with Ethiopia. We do want resolution on this, but we don't want to do more harm than good, and I suggest that a first step would be, in fact as Mr. Chair has pointed out correctly, to invite Mr. Axworthy. The caveat I would put is to really ascertain from Mr. Axworthy if Eritrea has been able to accept him at this point and accept the invitation to have him there on behalf of the United Nations.

Thank you, Mr. Chairman.

(1110)

The Chair: Are there any other comments? All agreed?

Madam McDonough.

**Ms. Alexa McDonough:** Very briefly, I want to reiterate that there's no suggestion that there be the kind of arbitrary imposition of some kind of embargo on aid to Ethiopia—in fact the opposite is true—but that we use our influence to try to help press towards a resolution.

Secondly, I think the final provision is an extremely important one, offering assistance in the demobilization of the respective armies, because what we've seen in many other countries is what horrendous problems have been created by the failure to do that, in Haiti, for example, with just terrible consequences. That's really the new added dimension of this from previous discussions.

**The Chair:** Is it agreed that we're going to draft the resolution motion or request when it will be possible to have Lloyd Axworthy appear in front of the committee on this issue? Agreed?

Some hon. members: Agreed.

**The Chair:** I want to ask my colleagues something. Madame Lalonde wanted to make a point, and we'll receive a list of new witnesses concerning Bill C-25: Mr. Michael Byers, Mr. Steve Staples, Anne Duhamel, and Yves Bélanger.

Madam McDonough, what's the background of Mr. Byers and Mr. Staples? We didn't see their CVs. I have no clue who they are or what they are doing.

Ms. Alexa McDonough: I'm happy to provide more detailed information on that, but let me say that I think every member of this committee is struggling to try to get as much understanding as possible of how we achieve a balance between the various interests involved in this new RADARSAT operation. We've heard now from the departmental officials. We've heard from commercial interests, which are legitimate, and I don't for a moment suggest otherwise. I also think we need to hear from people who are in the public interest/public policy sphere, who have some background in relation to this issue. I, for one, would be very concerned if I thought we would draw the line at the witnesses we've now heard and move to clause-by-clause consideration. I don't think we are anywhere near ready to do that.

Mr. Hornsby from RADARSAT told us this morning that he's had four years of input. He's almost satisfied that he's got everything he wanted from a commercial point of view. We have a responsibility to look at the broader public interest.

These witnesses I have suggested are probably quite well known to people for their broad public policy expertise. In particular, I want to stress the value of inviting Ross Neil because his academic work has been around the commercial remote sensing industry and the whole issue of balancing public interests with the expanding private interests in the domain of remote sensing.

• (1115)

The Chair: Ms. Phinney.

**Ms. Beth Phinney:** When I look at it quickly, there is nothing here saying what the qualifications of these people are necessarily. I would say, concerning Ross Neil, that it's very good to have your Ph. D. and it's a very desirable thing, but I've contributed to a lot of people's Ph.D.s by filling out questionnaires, and I'm not sure that makes them the experts. I'd like to see people who have served by working in the field for a while, not just having done their Ph.D.s on it. I want people who have experience out there. I would remove that one. I know he's in that field, but I just don't feel that one is qualified.

Maybe the professor knows. I wish we had more information about each one of them.

The Chair: Ms. McDonough.

Ms. Alexa McDonough: Can I suggest that we bring before the committee additional information on these people? I think people are aware that Michael Byers was for 12 years an outstanding professor of Canada-U.S. relations. Many cabinet ministers and prime ministers have gone to speak at Duke University where he has been head of that program. He's now head of the Liu Institute for Global Issues, and I don't know anybody who would suggest that his qualifications weren't quite superior to address this issue.

**Ms. Beth Phinney:** What does he know about this particular issue? What you've said doesn't make—

**Ms. Alexa McDonough:** It depends how narrowly you're going to define it. There are implications from the point of view of Canada-U. S. interests around defence, around environment, around military—

**The Chair:** I agree a little bit with you, but the bill is already accepted in a certain sense and we're looking at the bill now more from a technical view.

Madame Lalonde.

[Translation]

Ms. Francine Lalonde: Why did you say that the act had been adopted?

The Chair: I did not mention an act. I just said that a bill had been tabled.

Ms. Francine Lalonde: Of course the bill has been tabled.

The Chair: It has been tabled, but it has not been accepted by the committee.

**Ms. Francine Lalonde:** I would like to hear from other witnesses. Mr. Yves Bélanger is a university professor. He is a specialist in military equipment and the defence industry, both the military and the civilian aspects. He has an outstanding reputation in this field.

It would be ideal if we could find someone of the calibre of Ms. Stojak. She was really something.

[English]

The Chair: Okay.

[Translation]

Ms. Francine Lalonde: Mr. Patry, I am troubled by this bill because it is clearly a matter of transferring public technology. In fact, it goes further than transferring public technology. Public technology is being given to a private company as a gift. Even although the government has invested \$430 million compared to the company's \$92 million, it is the company which becomes the owner of this technology. In my opinion, that implies a considerable degree of responsibility. I fully support the government having a form of control, something which it is insisting upon. We are trying to do something which is extremely difficult to do. We have responsibilities on this front, particularly given the fact that this bill is extremely complex.

The Chair: Mr. Sorenson, the floor is yours.

[English]

**Mr. Kevin Sorenson:** I'm not certain that any...we could have an unending line-up of witnesses and it would still be a complex bill.

There are many other things too. We aren't done with ballistic missile defence. There are a lot of other issues that we want to bring out.

Is dragging Bill C-25 on with no imminent end the plan? What's the schedule like?

**Hon. Dan McTeague:** I want to help Mr. Sorenson on his point. I think it may be helpful to have submissions in writing from these individuals to the committee. The committee may judge whether or not it wants to proceed at that point.

Specifically on Madame Lalonde's concern, we're dealing with the regulations as they relate to this act. We can't decide now to turn back and say we're concerned about the private–public uses or, as she says, the gift the government has given to the private sector. That's a debate from 1999. That was six years before we arrived at this point.

We have arrived at a point at which the bill itself is not a matter of policy but rather a matter of development of an implementation of a treaty, and development that runs along very concurrently with issues of regulation.

As much as I understand the philosophical concern the member has, I also must take into consideration that the bill is a housecleaning matter. I think we have to deal with it as soon as possible with as much information as we can have.

In terms of having more witnesses piled on, Ms. McDonough knows we want to deal with other issues, BMD being one of them. I certainly don't want to see this bill used as a sort of opportunity for us to delve into that. Let's deal with that quite separately from this, and I think we'll do very well on it. I'm satisfied that this is not about ballistic missile defence.

• (1120)

[Translation]

The Chair: Over to you, Ms. McDonough.

[English]

**Ms. Alexa McDonough:** Mr. Chairman, I have to say that I'm really quite astounded by where we are in this discussion this morning. In my nine years on Parliament Hill, I have never known a committee to deal with a bill without bringing a single witness before the committee in response to the request of a committee member. So far, we have heard only from witnesses who were suggested and arranged by government.

**The Chair:** No, I'm sorry. I had authorization in December to start with the witnesses. I had a motion.

Ms. Alexa McDonough: To start with, right.

**The Chair:** This is what I have done. First of all, we had the government, and this morning we have a professor from McGill University.

Ms. Alexa McDonough: And for the first time, the committee—

The Chair: I just want to let you know that what you pinpoint was not the reality.

Ms. Alexa McDonough: No, the point-

**The Chair:** You made your point. I agree that we should have some other witnesses, but I've asked you to provide some CVs. You have a list of five people. Over there you have the president of OEA Technologies, who is also from the private sector as far as I'm concerned. It's not someone from a university, like Mr. Byers from the Liu Institute for Global Issues. I just want to pinpoint this.

If we are going to get another day on this, I want to make sure the witness will come here, because the principle of the bill was accepted for second reading in the House. Once the principle is accepted, we're not going back to the principle of whether we should pass it or not pass it. As Mr. McTeague just mentioned, we're going on about the way to study the bill itself and whether you want to bring some amendments.

I agree, but I want to get witnesses. You have had two months to provide the list. We're just getting the names now, and we don't know who they are. I don't know if anyone else knows who they are.

**Ms. Alexa McDonough:** For the record, I strenuously object. There has been no input on witnesses by the committee to date. You were authorized and you did what you were authorized to do, which is ask the department for suggestions of who might appear here today.

Let me also say for the record that no resumé was provided for any of the three witnesses who appeared here today, that I'm aware of. So I'm sitting here every bit as much in the dark about the resumés of the three witnesses from whom we've heard as you may be about the witnesses who have been suggested.

I will happily provide further information on the suggested witnesses, but the idea that we're talking about piling up witness upon witness as some kind of an obstructionist tactic is truly unwarranted and unacceptable, unless the committee now is packing up its tent.

**The Chair:** I'm sorry, we never pack. Please, Ms. McDonough, we don't pack. We listen to you very carefully.

**Ms. Alexa McDonough:** I would continue to argue that we're going to now begin the process of hearing from witnesses beyond the ones who have been arranged through government.

[Translation]

**The Chair:** Please be brief, Ms. Lalonde, we have to bring this to an end.

**Ms. Francine Lalonde:** I used the word "threat" when I was speaking to Mr. Hornsby. As we all know, the language used in the brief is "softer", that is what is meant by it.

It is important that the legislation contain a definition of "international obligations" and "international relations", but they cannot be defined by "national security" and "defence". That is simply not right. They are different things. They are different terms which reflect different fields. That being said, in the field of international relations, it is getting more and more like that.

If we are going to define only those terms, in my opinion, we have to come up with an acceptable definition.

**●** (1125)

**The Chair:** We have to end the sitting. I know that everyone has to leave at 11:30. We have already gone over our time by half an hour. I suggest we leave it up to the clerk to find other witnesses. I know you will not be here on Tuesday, Ms. Lalonde, but Mr. Paquette can be here.

If we cannot hear from any witnesses on Tuesday, we will schedule them for next Thursday. We will see whether Mr. Bélanger is available, as well as the witnesses proposed by Ms. McDonough or other witnesses. We were given a list of five people, but that does not mean that these five people will be able to make it on such short notice. We will look into that. It will be next Tuesday or Thursday.

We will hear from other witnesses then and we will go into clauseby-clause study the following week.

Does that suit you?

An Hon. Member: Yes.

[English]

**Hon. Dan McTeague:** Mr. Chair, I think this would be helpful for the entire committee. I think we started off on the right foot on Tuesday. I know how helpful these motions are, but if we're going to accomplish anything in the short timetable we have available to us, it would appear that we have a new motion in every committee, which is further going to make it impossible for us to do all of this work.

Despite your best efforts at the balancing act, I think it's incumbent on all members, Ms. McDonough, Mr. McTeague, Mr. Menzies, everybody, to stick to a regime, stick to a routine, and stick to the principles we're trying to achieve. You keep throwing motions at the committee. It's obvious that unless something enormous happens and we sit right through the summer, we're not going to be able to address all these issues seriously.

In order to effectively deal with all the bills and all the issues, I ask that we all try to cooperate in advance of the motions. That allows us at least some opportunity to make sure they're all addressed. I think we all have a serious concern to make sure that we address as much as we can, but we can't do it all, especially if there's a motion every bloody meeting.

Thank you.

The Chair: Thank you.

The meeting is adjourned.

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