The Honourable John Baird  
Minister of Foreign Affairs  
Foreign Affairs and International Trade Canada  
Lester B. Pearson Building  
125 Sussex Drive  
Ottawa, Ontario  
Canada K1A 0G2  

22 March 2012  

Dear Honourable Baird,  

It is my pleasure to submit for your consideration our Report titled: "Independent Review of the Remote Sensing Space Systems Act".  

We trust that our observations, findings and recommendations will assist the Government in its review of the legislation to ensure that it continues to fulfill the evolving needs of the remote sensing industry without compromising national security, the defence of Canada and the implementation of Canada's international agreements and treaties.  

Best wishes for your deliberations on these significant issues.  

Yours sincerely,  

[Signature]  

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Enclosure: Report and Appendices

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22 March 2012
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# Acronyms

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<th>Acronym</th>
<th>Description</th>
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<tr>
<td>CAP</td>
<td>Customer Access Profiles</td>
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<td>CSA</td>
<td>Canadian Space Agency</td>
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<td>EO</td>
<td>Earth Observation</td>
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<td>ESA</td>
<td>European Space Agency</td>
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<td>IADC</td>
<td>Inter-Agency Space Debris Coordinating Committee</td>
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<td>IASL</td>
<td>Institute of Air and Space Law (McGill University)</td>
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<td>OHS</td>
<td>Order Handling System</td>
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<tr>
<td>GMES</td>
<td>Global Monitoring for Environment and Security</td>
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<td>NATO</td>
<td>North Atlantic Treaty Organisation</td>
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<td>NORAD</td>
<td>North American Aerospace Defense Command</td>
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<td>RSSSA</td>
<td>Remote Sensing Space Systems Act</td>
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<td>SAR</td>
<td>Synthetic Aperture Radar</td>
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<td>S-AIS</td>
<td>Satellite Automatic Identification System</td>
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<td>SDAC</td>
<td>Science Data Control Checks</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNCOPUOS</td>
<td>United Nations Committee on the Peaceful Uses of Outer Space</td>
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<td>UNGA</td>
<td>United Nations General Assembly</td>
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<td>WMO</td>
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EXECUTIVE SUMMARY

The Remote Sensing Space Systems Act was enacted in 2005 to regulate the operation of Canadian remote sensing space systems and the distribution of data collected by such systems. The Act and the Regulations subsequently adopted thereunder both entered into force on April 5, 2007. Pursuant to section 45.1 of the Act, a team from McGill University's Institute of Air and Space Law was engaged to conduct an independent review of the provisions and operation of the Act. This report presents the findings and recommendations of the independent review covering the first five years of application of the Act. In accordance with the mandate of the review, this report focuses on the impact of the provisions and operation of the Act on (1) technological development and (2) the implementation of Canada's international agreements and treaties.

The main findings of the review are as follows:

1. Although the Act and the Regulations are not perfect, they nevertheless address some very important issues that need to be taken into account when conducting satellite remote sensing activities.

2. The impact of the Act and Regulations on technological development is mixed. Certain aspects of the Act and the Regulations (e.g., cryptography and system disposal requirements) may have the potential to positively impact the development of technology whereas certain other aspects (e.g., access restrictions to raw data) may hinder the development of technology.

3. The Act and the Regulations are extremely helpful in facilitating compliance with Canada's international agreements and treaties – obligations arising under multilateral and bilateral agreements as well as in the context of Canada's membership in a number of alliances and international organizations.

4. There is a general lack of clarity as to the scope of application of the Act and Regulations. In the absence of a broad overarching Canadian policy on space and legislation to implement the policy, the Act has been used as a means of addressing the national security concerns of space activities that are strictly speaking not remote sensing activities.

The report makes a handful of carefully considered recommendations aimed at improving the operational efficiency of the Act and the Regulations. These recommendations stem from the belief of the review team that the Regulations (rather than the Act itself) can be easily amended to bring about changes in the manner of implementation of the Act for purposes of achieving the desired objectives.
I. INTRODUCTION

A. Background of the RSSS Act and Regulations

On 25 November 2005, Parliament enacted the *Remote Sensing Space Systems Act* (RSSSA)\(^1\) to regulate the operation of Canadian remote sensing space systems and the distribution of data collected by such systems. According to a press release issued by the Department of Foreign Affairs and International Trade (DFAIT) on 23 November 2004 when the bill was first tabled in the House of Commons, the aim of the legislation was to protect "Canada's national security, national defence and foreign policy interests, while supporting [Canada's] continued leadership in the provision of satellite remote sensing data and services to government and private clients."\(^2\)

The RSSSA conforms to the provisions of the *Agreement Concerning Operation of Commercial Remote Sensing Satellite Systems* that was signed by Canada and the United States in 2000.\(^3\) High-performance remote sensing space systems may possess civil, military and strategic capabilities. Accordingly, the 2000 Canada-U.S. Agreement aimed to ensure that private remote sensing satellite systems would be controlled in each country in such a manner as to protect shared national security and foreign policy interests, while promoting the commercial benefits to be derived from these systems. The Agreement recognized that Canada and the U.S. have mutual interests in regulating and controlling private remote sensing satellite systems operating from their respective territories or subject to their respective jurisdictions. The Agreement was prompted by the transition of remote sensing satellite systems from public to private ownership in both countries. It made particular reference to RADARSAT-2, a Canadian remote sensing satellite employing an advanced microwave radar system called Synthetic Aperture Radar (SAR) that was in the planning phase at the time and which was to be owned and operated by private interests.

For decades, Canada has been both a pioneering force and a recognized global leader in the design, manufacture and operation of state-of-the-art, innovative satellite technology. Canadian remote sensing satellites such as RADARSAT-1 provide data on the basis of which important information can be produced. This information can be used to gain more (precise) knowledge on, for instance, the distribution of groundwater, minerals, oil and gas deposits, as well as in such fields as oceanography, geology, hydrology, agriculture, forestry and disaster

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1. See Appendix 1
response and mitigation. Further development of satellite remote sensing systems that provide such data is important, since Canadian government and industrial decision makers are demanding better-quality data to generate greater economic opportunities in these and other fields. The Act was therefore intended to help develop an internationally competitive Canadian satellite remote sensing industry and to ensure that Canadian companies remain global leaders in the development of this type of technology, applications, and provision of services by outlining a clear legal framework in which private remote sensing activities can evolve.

The Act establishes a licensing regime for remote sensing space systems and provides for restrictions on the distribution of data (particularly raw data) gathered by these systems. Additionally, the Act gives special powers to the Government of Canada to order priority access to data collected by licensed remote sensing systems or to order the interruption of service when it is deemed necessary to protect national security, national defence or foreign policy interests and/or to observe international obligations. In addition to authorizing Canadian companies to own and operate remote sensing satellites, the RSSSA also permits the reception, storage and processing in Canada of data collected by Canadian and foreign satellites alike, and the distribution of such information to potential clients without compromising the national security, national defence and foreign policy interests of Canada. The provisions of the Act apply with equal force and effect to remote sensing space systems of Her Majesty in right of Canada and of the provinces. However, the Governor in Council is permitted to make an Order that modifies the application of the RSSSA and the subsequently adopted Regulations to remote sensing space systems operated by the Department of National Defence or the Canadian Space Agency (CSA). The said Order may adapt any of the provisions of the Act or the Regulations for the purpose of that application. So far, no such Order has been made.

Subject to the overriding power of the Governor in Council to designate a member of Cabinet to be the Minister for the purposes of the Act, the Minister of Foreign Affairs has primary responsibility for the implementation of the Act. The Minister of Foreign Affairs also has responsibility to recommend to the Governor in Council regulations deemed necessary for carrying out the purposes of the Act. Pursuant to these provisions of the RSSSA and upon the recommendation of the Minister of Foreign Affairs, the Remote Sensing Space Systems Regulations (Regulations)\(^4\) were made by the Governor in Council on March 29, 2007. The RSSSA and the Regulations entered into force on April 5, 2007 and on that same date, both the RSSSA. To date, a total of about fourteen applications for licenses have been handled or are in the assessment process under the licensing and regulatory framework established by the RSSSA and the Regulations.

\(^4\) See Appendix 2
B. Mandate of the review
Under and by virtue of Section 45.1 of the Act, the Minister of Foreign Affairs is required to cause an independent review of the provisions of the Act to be conducted from time to time in order to assess, in particular, the impact of the Act on technological development and on the implementation of Canada's international agreements and treaties. Further, the Act obliges the Minister to table the report of such a review before each House of Parliament within five years after the coming into force of the Act, and within every five-year period thereafter.

By letter dated December 30, 2011, the Institute of Air and Space Law (IASL) of McGill University's Faculty of Law was engaged by the Department of Foreign Affairs and International Trade to conduct an independent review of the provisions and operation of the Act in accordance with Section 45.1 of the Act and to prepare a report to be tabled before Parliament by April 2, 2012. The engagement was taken up by Professor Ram Jakhu, Associate Professor at the IASL, working in close collaboration with Dr. Catherine Doldirina and Dr. Yaw Otu Mankata Nyampong, both post-doctoral research fellows at the IASL. This report presents the findings of the team's independent review of the key provisions and operation of the RSSSA and the Regulations.

C. Methodology of the review
First, the IASL team conducted a desk review and a comparative analysis of the provisions of the RSSSA and the Regulations (as subsequently amended) taking into account Canada's international obligations, as well as similar legislative regimes in other countries that are actively involved in the regulation of remote sensing space activities, particularly the United States and Germany. For the purpose of gathering information relevant to the operation of the provisions of the RSSSA and the Regulations, the team prepared a detailed interview questionnaire and circulated it amongst licensees and other entities whose activities are affected by the operation of the RSSSA, including Canadian government departments and agencies, as well as private entities. The review team also conducted personal and telephone interviews with officials of these entities to clarify the responses obtained from the questionnaire and also to elicit further information for purposes of the review.

To ensure that confidential or proprietary business information provided by respondents would not be disclosed or otherwise used inappropriately, all respondents were given assurances that any information provided will be strictly and exclusively used for the purposes of the review. In some cases, appropriate non-disclosure agreements were signed between the review team and the respondents concerned. The results of the analysis as well as the responses obtained from

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5 Appendix 3.
the questionnaire and interviews have been collated and synthesized into the findings which are hereby presented in this report. In order to maintain the independence of this report, every effort has been made to avoid attribution of any findings to any particular respondent who participated in the review process.

D. Structure of the report
In line with the mandate of the review, the report's primary focus is an assessment of the key provisions and operation of the RSSSA and Regulations having particular regard to their impact on (1) technological development and (2) the implementation of Canada's international agreements and treaties. The impact of the provisions and operation of the RSSSA and the Regulations on technological development is discussed in section 2 of the report while section 3 focuses on the impact of the Act and Regulations on the implementation of Canada's international agreements and treaties. The conclusions and key recommendations of the review are presented in section 4. Copies of the RSSSA and the Regulations are appended to this report along with an updated copy of the interview questionnaire prepared by the review team.

II. THE IMPACT OF THE RSSSA AND THE REGULATIONS ON TECHNOLOGICAL DEVELOPMENT

A. The Scope of the RSSSA and the Regulations

1. Definition of remote sensing
In its chapeau, the RSSSA describes itself as "an Act governing the operation of remote sensing space systems". However, there is no indication as to which specific aspects of the operation of remote sensing space systems are intended to be regulated under the Act. As such, from the very outset, the scope of application of the Act is unclear and it is doubtful whether the RSSSA's purposes include "technological development". Although the RSSSA and the Regulations ostensibly govern the entire range of activities typically considered part of remote sensing, their provisions were designed to focus on the regulation of Earth observation (EO) rather than on all other types of remote sensing. This is exemplified by some of the definitions appearing in Section 2 of the Act – a "remote sensing satellite" for example is defined as "a satellite that is capable of sensing the surface of the Earth through the use of electromagnetic waves" [emphasis added]. It also appears that the Act was designed particularly to fit the RADARSAT-2 context of a SAR system conducting EO, with raw data and derived information products being owned and distributed by the private sector. Over the last five years, as the technology keeps evolving, there is a wider array of technologies and space applications at play, and a fundamental question that keeps recurring is whether or not certain space applications such as Satellite Automatic Identification System (S-AIS) and even weather satellites fall within the
scope of application of the RSSSA. Stated differently, it remains unclear whether a satellite that is capable of sensing other objects in close proximity to it in space at high resolution (but only capable of sensing the surface of the Earth at such a low resolution that the resulting data is useless) will fall within the definition of a remote sensing satellite under the RSSSA.

To date, all such questions that have arisen in the context of the implementation of the RSSSA have been resolved unilaterally by the Minister. As such, if the Minister makes a determination during the licensing process that a particular type of space application or technology falls within the scope of the RSSSA, then the Act would apply to regulate that activity even though, strictly speaking, the activity concerned might neither fit within the language of the RSSSA nor within the traditional contemplation of remote sensing activities. Unfortunately, there are no published criteria in the RSSSA or the Regulations that govern the Minister’s determination as to whether or not a particular application or technology falls within the scope of the RSSSA. Given the lack of a precise scope of application and focus of the Act, it is envisaged that this uncertainty will only increase as existing technological applications continue to expand, and new technologies and applications akin to remote sensing (such as space sensing as opposed to EO, and on-orbit servicing of satellites) come online. This state of uncertainty of the law could negatively affect technological progress in this field by causing prospective developers and businessmen to conduct their activities in other countries, where the legal and regulatory frameworks are clearer in scope.

2. **Definition of remote sensing data and products**

Even with respect to EO, the RSSSA’s distinction between raw data and products does not appear to correspond to industry standards or to widely used and internationally accepted definitions. There is a significant disparity between the terminology used in the RSSSAA and the terminology commonly used by the remote sensing industry in Canada and Europe. The differentiation between raw data and products in the RSSSA and the Regulations is also not well adapted to evolving satellite EO technology. Under the Act, all remote sensing data (including EO data) are considered to be raw data until they are transformed into a format from which it is substance impossibility to reconstitute the raw data. Flowing from this definition, all remote sensing data containing phase information are classified as raw data. With today's

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6 Phase is a property of a periodic phenomenon, for example a wave, referring to its starting point or advancement (fraction) relative to an arbitrary origin. In radar remote sensing, the concept of phase is usually applied to the oscillation of electromagnetic waves. When viewed as a cyclical phenomenon, like wave motion or the crankshaft motion of a bicycle pedal, phase can be expressed in degrees. One-quarter cycle represents a phase rotation of 90 degrees; completion of one complete cycle corresponds to a phase rotation of 360 degrees. Waves are considered in-phase, if their origins of phase 0 degrees are perfectly aligned; out-of-phase conditions are met when phase 0 and 180 degrees are aligned. Precise knowledge of phase properties in radar signal data is a key element in interferometric as well as in polarimetric SAR. See ESA, Radar and SAR Glossary, Definition of "Radar Phase",

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advancements in technology, data can be transformed (e.g., geocoded data), but can also retain the phase information and will still be considered raw data under the Act. Strict adherence to the RSSSA's differentiation between raw data and products limits the commercial utility of, and the potential for technological development in relation to, raw data due to the restrictions imposed on the communication of raw data (discussed below). A more common approach within the global EO industry is to differentiate between Complex Products (which retain phase information) and Detected Products (which do not retain phase information). Such a differentiation between Complex and Detected Products will still make it possible to address the national security concerns related to raw data while only minimally impairing the commercial utility of raw data, as well as the technological development associated with their processing and use applications. In this regard, the Act's definition of "transform" could be simple: "any process that transforms signal data creates a product". Consistency with international standards is a necessary prerequisite for the development technology and business.

B. Restrictions on access to raw data and products

According to one of the *sine qua non* conditions of a RSSSA licence, raw data from a licensed system may only be communicated without the Minister's prior approval to: the licensee; a system participant;\(^7\) or, the government of a country whose territory was remotely sensed in order to obtain the data.\(^8\) Raw data from a licensed system may not be communicated to all other persons or classes of persons unless the Minister so authorizes in the licence. By these provisions, the Act grants substantial discretion to the Minister to actively control the distribution of raw data gathered by licensed remote sensing space systems. This discretion is reflected in subsections 8(6) and 8(7) of the Act, which further permit the Minister to authorize the communication of raw data and to restrict the distribution of remote sensing products from licensed systems to any persons or classes of persons (other than the licensee or system participants) on any conditions that the Minister considers appropriate. The RSSSA provides that in specified cases or circumstances, the conditions may include requirements that, the communication of the raw data be subject to the Minister's prior approval or be done only under a legally enforceable agreement entered into in good faith that includes measures respecting their security or their further communication.

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7 A "system participant" is a person or an entity who is so designated by the Minister in a license condition under section 8(5) of the Act and who is thereby permitted to carry on any controlled activity in the operation of the licensed remote sensing space system as the Minister may specify.

8 According to Principle XII of the 1986 UN Remote Sensing Principles, a country whose territory is remotely sensed by another country shall have access to primary data and processed data thereby produced on a non-discriminatory and reasonable cost basis. As discussed below, this is a reflection of Canada's adherence to that principle.
In implementing these provisions and the discretion thereby given, the Minister has imposed a requirement of Science Data Control Checks (SDAC) on all prospective customers seeking to obtain raw data (or products as the case may be) from licensees, and these Checks are linked to each licensee's Order Handling System (OHS). Consequently, the Minister's clearance, otherwise known as a single customer authorization, must be obtained for each prospective recipient of raw data from a licensed system before the licensee may communicate raw data to such recipient. Thus, in order to obtain the Minister's clearance, every prospective user of raw data from licensed systems irrespective of his or her country of origin must be categorized by the Minister under the Customer Access Profiles (CAP) tables\(^9\) as to its eligibility to obtain data along the different imaging modes of the licensed remote sensing space system concerned. Although the Act provides the alternative mechanism of communicating such data and/or products to recipients under a legally enforceable contract entered in good faith, that includes measures respecting the security of the data and its further communication, in practice, it would appear that this alternative mechanism is the exception rather than the rule, and that the sole means of communicating data to recipients who are not governments whose territories have been sensed, licensees or system participants is to obtain the prior approval of the Minister under the CAP tables.

The operation of the RSSSA and the Regulations has therefore resulted in the imposition of a significant day-to-day administrative burden on licensees due to the requirement of the Minister's clearance for every single customer authorization and also in the mandatory tracking of data dissemination by licensees. Clearly, these restrictions on the communication of raw data are driven by national security considerations. Nevertheless, the resultant difficulty that prospective users are faced with in their efforts to obtain raw data and products from licensed systems cannot be underestimated. Even Canadian users face restricted access to specific modes of raw remote sensing data. Ultimately, the restrictions imposed on access to raw data and products may have the potential to limit the capacity of the Canadian remote sensing industry to develop new applications or products based on those restricted modes. As such, to the extent that the operation of the RSSSA and the Regulations prohibit or restrict communication, use, commercial exploitation of, or access to, certain modes of raw remote sensing data solely on account of national security concerns, they may stifle technological development. It is obvious that the provisions of the RSSSA are not explicitly directed towards technological development. This notwithstanding, the implementation of the Act may well

\(^9\) Customer Access Profiles are long tables maintained by DFAIT - one for each country - with the designation of every single potential customer spelling out their respective access profiles for remote sensing data from licensed systems (i.e., imaging modes and latency of data delivery). When a potential customer's name does not appear on the table, the licensee must submit an application to DFAIT and wait until it obtains the CAP for that customer. These tables are not publicly available.
result in a regulatory framework that also enables and encourages technological development if a proper balance is maintained between the national security considerations underlying the RSSSA's data access restrictions and the necessity to make raw data and products more accessible to users.

C. Cryptography and other data protection requirements

It is instructive to note that the establishment or use of cryptography in communications with a remote sensing satellite of a licensed system or the use of information assurance measures for the system form part of activities that are controlled under the RSSSA for which a license is automatically required. This notwithstanding, the RSSSA grants the Minister discretion to specify conditions in a licence relating to the use of cryptography and information assurance measures by the licensee if considered appropriate. Also, the Minister may not issue a licence without having first approved a satisfactory system disposal plan10 for the licensed system which, among other things, provides for the protection of the environment, public health and the safety of persons and property. The conditions relating to the establishment or use of cryptography and information assurance measures are clearly intended to protect information and information systems by ensuring their availability, integrity, authentication confidentiality and non-repudiation. Implementation of these conditions may have a positive impact on technological development particularly to the extent that it allows the use of Canadian cryptographic technology and information assurance measures. The law’s insistence on the submission of a satisfactory system disposal plan prior to the issuance of a licence may also have a positive effect on the development of technology. It will certainly encourage and facilitate the development of technology that enables licensees to meet their system disposal obligations at the end of their respective missions. Unfortunately, it is impossible to assess the extent to which these potential impacts have been realized since the RSSSA and the Regulations have only been in force for the last five years.

D. Focus of the RSSSA

If any technological development in the field of remote sensing is to be achieved and maintained, it is expected that this will occur primarily at the level of the Canadian remote sensing industry. Neither the RSSSA nor the Regulations contain any provisions that specifically or proactively address issues related to the facilitation of research and development in satellite remote sensing. The definition of "controlled activities" in the Act is wide and encompasses all kind and manner of activities, irrespective of the underlying purpose or objective of the activity.

10 Although not specifically defined by the RSSSA or the Regulations, a "system disposal plan" typically outlines a series of actions and procedures that will be carried out prior to or at the end of the mission to ensure that the both the hardware of the licensed space system and the data collected/produced by the system are disposed of in a secure and appropriate manner.
Notwithstanding the foregoing, the RSSSA and the Regulations do not provide any licensing exemptions to private and/or governmental entities conducting controlled activities solely for experimental, educational, research, technology demonstration and purely scientific purposes. The absence of provisions that encourage research and development and provisions that grant exemptions from licensing in specified cases may potentially dampen innovation and technological development in the sector.

The review of the substantive contents of the Act and Regulations suggests that the focus of the regulatory regime therein established is primarily directed towards the national security aspects of remote sensing activities, and the control of dissemination of remote sensing data as opposed to technological development. It is important to recognize that, since any regulatory process in and of itself has the potential to dampen innovation, a key challenge in adopting any such regulatory regime is to aim at striking a correct balance between the national security concerns sought to be addressed by the regime and the need to create an enabling regime that permits the achievement of business objectives with a reasonable degree of ease. As demonstrated above, in the case of the RSSSA and the Regulations, it would appear that such a delicate balance was not struck between these two competing objectives. The RSSSA's focus on national security concerns clearly outweighs the need to enhance the achievement of the business objectives of both governmental and private remote sensing operators.

III. THE IMPACT OF THE ACT AND REGULATIONS ON CANADA'S IMPLEMENTATION OF INTERNATIONAL AGREEMENTS AND TREATIES

Whereas in the field of the development of technology not all things are straightforward, the Act does help Canada to meet a number of its obligations both under international space law, and other areas of public international law. This section highlights some of these obligations, and describes how enforcement of the RSSSA contributes to their fulfilment. In addition, it points out some of the issues that may have to be addressed in order to improve upon the level of implementation of Canada's international obligations within the national legislation.

A. Obligations under the relevant space law treaties
Canada is party to the two important treaties that codify the international law framework governing the conduct of space activities, namely: the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies;\(^{11}\) and the 1972 Convention on International Liability for Damage Caused by

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\(^{11}\) Outer Space Treaty.
Space Objects. The fundamental principle of space law that the Outer Space Treaty codifies is authorisation and continuing supervision of space activities conducted by non-state actors that stems from the international responsibility for national space activities assumed by states parties to the treaty. Within the Act – by requiring the issuance of a licence prior to the conduct of remote sensing activities, and thereby providing the government with a mechanism to monitor those activities – the RSSSA implements Article VI of the Outer Space Treaty and thereby complies with the obligation to authorise and continually supervise this type of space activity when conducted either by its nationals or from its territory.

In connection with the RSSSA's impact on the fulfilment of Canada's obligations under the Liability Convention, the licensing mechanism introduced in the Act and implemented by DFAIT, can, at least with regard to the Canadian licensees, be interpreted as designating Canada as the "launching state by procurement" (Article II). This certainly helps in identifying Canada as the liable state for damage that space objects operated by licensees may potentially cause outside Canada. A major shortcoming of the Act, however, concerns the lack of recourse mechanisms in relation to the government's potential exposure to international liability. The RSSSA fails to expressly codify the right of recourse of the Canadian government against licensees (particularly private companies or persons who own/control the licensed system) to recover damages it may be required to pay to foreign countries and third parties in its capacity as a launching state. There are also no provisions in the Act and the Regulations requiring licensees to maintain adequate insurance or other financial guarantees for their potential exposure to liability. These lacunae do not, in fact, impede the fulfilment of Canada's obligations under the Liability Convention. Nonetheless, addressing these gaps could help clarify the relationship between the government of Canada and the relevant persons/entities under its jurisdiction with regard to the burden of compensating those who suffer damage from licensed remote sensing activities.

Canada's obligations assumed under the 1975 Convention on the Registration of Objects Launched into Outer Space are the only ones that are not properly incorporated into or reflected in the RSSSA. Section 21 of the Regulations, captioned "Launch and flight sensors", obliges a licensee to provide the Minister with information regarding the launch of a remote sensing satellite, but the information required does not mirror the list of particulars that Canada as the launching state is obliged to submit to the Secretary General of the United Nations (UN) under and by virtue of Article IV of the Registration Convention. Most likely, the RSSSA is not the appropriate piece of legislation to regulate this issue, but it needs to be

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12 Liability Convention.
13 Article VI, Outer Space Treaty.
addressed, particularly with regard to situations where space systems are launched and operated by private entities.

B. Other multilateral treaties

Canada is a long-time partner of the European Space Agency (ESA) and the Cooperation Agreement that formalises the relationship between the two was extended in 2010 for another ten years (i.e., until 2020).\textsuperscript{14} Canada has also signed the ESA Convention as an associated state. There is very strong cooperation between Canada and Europe in the field of remote sensing, including Canadian participation in the Global Monitoring for Environment and Security (GMES) initiative, as well as participation in the 2000 International Charter on Space and Major Disasters that requires exchange or provision of, as well as access to, Earth observation (EO) data that without doubt falls within the concept of remote sensing data as per the RSSSA. The obligations imposed on Canada through the relationship with ESA need to be taken into account as they might potentially affect the operation and use of Canadian-licensed remote sensing space systems. The extent to which the Act can reconcile commercial interests and Canada’s obligations flowing from its relationship with ESA is not clear, as this is not a matter that is expressly addressed within the Act.

Canada is also a member of the World Meteorological Organisation (WMO) that has adopted a resolution on policy and practice for the exchange of meteorological and related data and products including guidelines on relationships in commercial meteorological activities,\textsuperscript{15} as a means of broadening and enhancing the free and unrestricted\textsuperscript{16} exchange of meteorological and related data and products. The mechanism adopted represents a three-tier practice. Firstly, a minimum set of essential data and products "required to accurately describe and forecast the weather and climate" should be provided on a free and unrestricted basis. Secondly, additional data and products required to sustain WMO programmes at the global level, provided that the members retain the ability to place justified conditions upon their re-export outside the receiving country for commercial purpose should be freely exchanged. Thirdly, all data and products exchanged under the auspices of the WMO for research and education communities in connection with non-commercial use should be made available on the basis of open and unrestricted access. To some extent, meteorological satellites may be considered to be remote sensing satellites – indeed this appears to be the approach adopted by the Minister in the

\textsuperscript{14}http://www.parabolicarc.com/2010/12/15/esa-csa-renew-cooperation-agreement/
\textsuperscript{16}“Free and unrestricted” means non-discriminatory and without charge, according to Resolution 23 (EC-XLII)—Guidelines on international aspects of provision of basic and special meteorological services. "Without charge" means without charge for the data and products themselves.
implementation of the RSSSA. Hence, if a (commercial) meteorological satellite (system) is licensed by the Minister, the question of Canada's international obligations of as a member of WMO (particularly under Resolution 40) will have to be addressed in order to ensure their fulfilment on the one hand, and successful operation of the licensed system on the other.

C. Bilateral agreements
The adoption of the RSSSA was largely driven by the Agreement Concerning Operation of Commercial Remote Sensing Satellite Systems that Canada and the US concluded in 2000. This Agreement envisaged that both countries would ensure that remote sensing space systems would be controlled in such a manner "as to protect shared national security and foreign policy interests while promoting the commercial benefits derived from these systems."\(^{17}\) It also obligated Canada to update its legal regime governing remote sensing activities to make it comparable to that established in the US by the Land Remote Sensing Space Policy Act of 1992. Unfortunately, the full text of the Agreement, including its annexes, is not publicly available, so not all of Canada's obligations arising thereunder can be discussed in this report.\(^ {18}\)

The Canadian government's compliance with regard to the first obligation under the Agreement – security should be stated in affirmative. The primary focus of the RSSSA is indeed on safety and security, and the Minister can control distribution of particularly raw data quite substantially in order to ensure that they are not provided to those who might jeopardise Canada's national security, the defence of Canada, the safety of its citizens and the observation of its international obligations. The fulfilment of the second obligation – promotion of the commercial benefits – still remains to be confirmed, as five years of operation of the Act and Regulations is too short a period to make precisely accurate conclusions about the overall impact of the Act. However, there are indications that progress is being made in this direction as well since the licensing procedure is neither too long nor expensive. In reviewing licensing applications, the Minister consistently seeks input from all potentially interested government departments in order to address both the needs of the licensee and those of the government. Further, the Minister is working on streamlining the licensing procedure and standardizing the form of the licence so that it is as clear and transparent for the licensee as possible. In addition, due to the all-encompassing interpretation of "remote sensing", a number of different systems can be (and have at least provisionally been) licensed under the Act, including Satellite Automated Identification System (S-AIS) data and potentially space remote sensing satellite(s). Such an approach can be seen as favourable to the promotion of commercial benefits since


many more persons who wish to pursue remote sensing activities can be sure that they will be properly licensed in accordance with the rules and requirements of the RSSSA and Regulations.

However, the provisions of the RSSSA do not seem to be very comparable to those of the US Land Remote Sensing Policy Act: they each use different terminology in reference to some of the most important notions of remote sensing (activities); they each prescribe a different period of time within which an application for a licence must be assessed and a decision reached; and, they each contain a number of unique norms that are not present in the other Act. To the extent that it can be concluded that these differences are of major significance, it could be said that Canada does not comply with this particular obligation assumed under the 2000 Canada-US Agreement.

D. NATO, NORAD and participation in UN Peacekeeping operations

RSSSA provides, at the very least, a sound basis for ensuring safety and security of remote sensing activities, including reception and distribution of remote sensing data and products to adequately meet the obligations assumed by Canada through its membership in alliances such as the North Atlantic Treaty Organisation (NATO) or the North American Aerospace Command (NORAD). Firstly, ensuring that the data are not transferred or otherwise communicated to persons who can be considered a risk in terms of security to Canada, but also, potentially, to members of the Alliances or other comparable organisations, contributes to the fulfilment of Canada's obligations under treaties that establish such organisations or partnerships.

Furthermore, the possibility for the Minister to impose the use of cryptography on the licensee contributes to the secure handling of data. Overall, the restrictions as to the types of data that are shared or distributed will have a strategic effect on data distribution that can satisfy the conditions of Canada's participation or involvement in NATO, NORAD or any other comparable organisations or partnerships. However, Canada's licensing conditions and other requirements concerning the handling of data from remote sensing satellite systems should contain as few "grey zones" – poorly defined concepts – as possible, since this is precisely the factor that may hinder international cooperation with partners. There is a general understanding among those involved in the enforcement of the Act that even purely commercial remote sensing satellite systems need to be controlled (by the government), and the restrictions and control mechanisms that the RSSSA prescribes serve this purpose quite well.

Other mechanisms provided for in the Act that can directly aid the fulfilment of Canada's obligations under NATO or NORAD, or aid its participation in UN peacekeeping operations, are

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19 Even though some opinions gathered while conducting research for this report voiced the need for more control.
(1) the government's ability to order priority access to data gathered by licensed systems and
(2) the right of the Minister to suspend licences or interrupt provision of services in cases
prescribed within the law under Sections 11, 14 and 15 of the RSSSA. The necessity of fulfilling
international obligations provides justification for the Minister to use each of these
mechanisms. These measures are considered appropriate and necessary provided that the
conditions of their application are strictly adhered to both by the government and the remote
sensing industry.

E. Other international documents
The international document most relevant to the conduct of remote sensing activities is the UN
Declaration of Principles relating to Remote Sensing of the Earth from Outer Space.\(^{20}\) UN
Declarations are non-binding on member states. However, their provisions may, after a period
of time and following their acceptance as such by the broad majority of States, acquire the
status of customary international law and become binding for any State that engages in
activities to which they apply. Today, experts agree that at least some of the principles set out
within this document have attained the status customary international law. For instance, the
RSSSA incorporates Principle XII of the Declaration into every licence issued by the Minister in
the form of a mandatory licence condition under section 8(4)(c). As a result, the RSSSA
establishes for the government of a sensed state the right of access to data gathered over its
territory on a reasonable cost and non-discriminatory basis. The situation is, however, different
with regard to Principle I of the Declaration that classifies remote sensing data and information
according to three different categories. In its classification of remote sensing data, the RSSSA
uses terminology that significantly differs from that stipulated by the UN Declaration of Remote
Sensing Principles. Even if the notion of "remote sensing" is interpreted as inclusive of but not
limited to "remote sensing" as typically understood under the UN Declaration of Remote
Sensing Principles (i.e., "Earth observation"), the three distinctive types of data and information
prescribed by the UN Principles should be incorporated into the RSSSA in order to provide a
legal basis for differential treatment of different types of data.

Other international documents primarily relevant to space debris mitigation may affect the
conduct of remote sensing space activities. These include: the 2001 Inter-Agency Space Debris
Coordination Committee (IADC) Space Debris Mitigation Guidelines, as well as the United
Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) Space Debris Mitigation
Guidelines endorsed by the UN General Assembly (UNGA) in 2008 with the adoption of
Resolution 62/217. Both sets of Guidelines outline some basic requirements to be fulfilled and
activities to be undertaken by space actors and operators in order to mitigate the generation of

space debris during the conduct of space activities. These Guidelines are now being adhered to by many space faring nations. For this reason, it is advisable that system disposal plans required to be submitted before the Minister may issue a licence be in conformity with the standards set forth within these Guidelines. This will ensure consistency in the practice of dealing with space debris and, as well, clarify the requirements that a system disposal plan must meet for the benefit of all applicants.

As discussed above, the RSSSA and the Regulations do not expressly provide for a right of recourse on the part of the government to proceed against and recover from licensees any amounts that it may be required to pay to foreign third parties for damage caused by a licensed remote sensing system. Neither do the RSSSA and the Regulations require licensees to maintain insurance coverage or other financial guarantee arrangements concerning such potential liability. It is interesting to note, however, that under section 9(1)(b) of the Act, the Minister may not issue a license without having first approved satisfactory arrangements relating to the guarantee of the performance of the licensee's obligations under the system disposal plan. Clearly, this demonstrates the willingness of the government to ensure that remote sensing operators licensed under the RSSSA are financially capable to conduct their activities in an environmentally responsible manner.

IV. CONCLUSIONS AND RECOMMENDATIONS

RSSSA is a piece of legislation that Canada needs, since it regulates one of the most important and advanced types of space activities in the country – satellite remote sensing. The first five years of its implementation and enforcement show that although it is not perfect, it does address some important issues that need to be taken into account when conducting satellite remote sensing activities, and hence need to be reflected in a licence granted under the Act.

With regard to the impact of the RSSSA and the Regulations on technological development, a more thorough assessment could not be performed as the Act and the Regulations have only been in force for five years. Nevertheless, one of the major findings of this review is that the scope of application of the Act and Regulations is unclear. Obviously, the provisions of the Act seem to focus narrowly on EO as opposed to the broader context of remote sensing. In spite of this, other remote sensing space systems such as S-AIS are being regulated under the Act. As a result, there is a lack of clarity as to whether (and to what extent) new and emerging space technologies similar to EO but different in important respects that still qualify as remote sensing (in general terms) will fall to be regulated under the RSSSA. So far, the Minister has employed an all-encompassing approach in implementing the Act, yet there are no specified criteria for determining whether or not a particular activity falls within the scope of the Act.
Such lack of clarity may have a negative impact on technological development. Also, the national security considerations underlying the RSSSA seem to have taken a prevalent role in the implementation of the Act. As such, significant access restrictions have been imposed particularly on raw data collected by licensed systems. This may also have a potentially negative impact on technological development since the data may not be disseminated as widely as possible. On the other hand, the Act's insistence on licence conditions relating to cryptography and information assurance as well as system disposal plans (if clearly and properly designed) may have a positive impact on technological development, particularly if licensees are not restricted in their choice of cryptography or system disposal plans.

The RSSSA is largely in conformity with Canada's relevant international obligations. The reason for this may the fact that drafting and adoption of the RSSSA was primarily driven by Canada's international obligations assumed under a bilateral treaty with the U.S., or because Canada generally strives to ensure that its national legislation reflects and is in conformity with the norms of international law by which it is bound. The very licensing mechanism that the Act establishes directly transposes the international obligation assumed under the Outer Space Treaty to authorise and continually supervise space activities conducted by non-governmental entities and, as well, establishes necessary ties to determine whether Canada is a launching state for the purposes of the Liability Convention in each particular case. The provisions of the RSSSA that are driven by safety and security concerns facilitate Canada's compliance with its obligations and commitments arising from its membership of NATO, NORAD and other comparable international organisations.

Fulfilment of at least some of the international obligations might require a degree of special attention when implementing the provisions of the Act. One example could be activities of Canada within ESA, and the latter's modified approach to the availability of, and access to, EO data – less restricted and free for specific purposes. This might affect the validity of at least some of the restrictions on access to and dissemination of remote sensing data by licensees in Canada, and hence needs to be taken into account during the assessment process. Compliance with the UN Declaration on Remote Sensing Principles might be another issue, particularly in the field of differences between the terminology used in the RSSSA and the UN document.

The following key recommendations flow from the main findings of the review and they are intended primarily as a means of improving the operational effectiveness of the legislative framework:
A. The purpose and goal of the Act

The analysis undertaken and opinions regarding the RSSSA gathered for the completion of this report clearly indicate the need to have clarity in purpose and objectives of the Act and Regulations to avoid ambiguity and to facilitate its proper implementation. The clarification can be achieved in several different ways that, to an extent, can be seen as complementing each other.

a. Incorporation of provisions in the Regulations that explicitly declare the purpose and scope of the legislative framework, and also ensure that the implementation of the Act in a manner that facilitates the achievement of the envisaged goals; and/or
b. Development and adoption of policy that will set the priorities in and directions of the development of satellite remote sensing technology, applications and services. They can then be used to, again, properly interpret the provisions of the Act during its implementation and enforcement.

In addition to this recommendation, even though not directly linked to the Act itself, it is necessary to point out that there is a general recognition of the need to have an overall Canadian vision (policy) for space and for remote sensing as a uniquely sensitive space application. The adoption of such a policy would be beneficial in terms of shaping the government's vision as to the direction of and anticipated results from the implementation of the RSSSA – an element of policy direction that is presently lacking within the Canadian regulatory framework governing remote sensing. Once the space policy is established, it will be important also to enact legislation that implements the general policy in a broad overarching manner, thereby regulating the conduct of all space activities. It would appear that, in the absence of a comprehensive legislative framework that governs all kind and manner of space activities, the Minister has had no option but to assume jurisdiction over space activities that may have an impact on national security, the defence of Canada and the implementation of international agreements and treaties under the powers granted to him by the RSSSA and the Regulations. This may help explain why certain activities are presently being licensed and regulated under the RSSSA although they are not remote sensing activities strictly and properly so called.

B. The scope of remote sensing

There seems to be no explicit or precise consensus as to the scope of the most crucial concept used in the RSSSA – remote sensing (activities and data). On the one hand, the definition of a "remote sensing satellite" clearly reflects a leaning of the RSSSA towards EO. On the other hand, the scope of activities falling within the ambit of "controlled activity" as defined in the Act is so broad as to encompass techniques used in EO, S-AIS, space observation and other related activities. During the conduct of the review, diametrically opposed views were expressed by respondents as to the proper scope of remote sensing: from limiting it to EO, through space
observation to on-orbit servicing. What can be problematic (as a result of this difference in opinion about the proper scope of remote sensing) is the equal treatment of different subject matter (data and information). The following recommendations might be further developed and used as a means of improving the situation:

   c. Consideration should be given to prescribing specific definitions for the different types of remote sensing data in the Regulations;
   d. Consideration should also be given to amending the Regulations to differentiate between licensing requirements for different activities/data on the basis of the specific security concerns associated with the type of activity/data concerned.

C. **The right of recourse**
There is the need to introduce provisions in the Regulations that acknowledge or establish the government of Canada's right of recourse against licensees for any compensation the government may be required to pay to foreign governments and third parties as a result of its obligations under the Outer Space Treaty and the Liability Convention.

   c. This can be achieved by way of a licence requirement or a licence condition prescribed in the Regulations – additional licence conditions may be prescribed in the Regulations by virtue of section 8(4) of the Act;
   d. The Regulations should also set out and require compliance by applicants with minimum insurance requirements based on an international standard regarding Probable Maximum Loss (PML) estimates as part of the licensing process.

D. **The term of the licence**
It is widely agreed that the term of the licence should be the expected lifespan of the spacecraft or remote sensing system for which a licence is sought. The discretion granted to the Minister under the Act to determine the term of each license appropriately accommodates this flexibility. However, it may be advisable to amend the Regulations by specifying a requirement that the Minister must take into consideration the anticipated lifetime of the space object or system concerned in exercising his discretion to determine the term of the license in each case.

E. **Implementation of the RSSSA**
Licensing of remote sensing space systems is a highly technical process that requires an understanding of complex operational, security and other issues involved in the activity for which the licence is sought. Organizational resources required for the implementation of the Act and Regulations can be enhanced in several complementary ways. In particular,

   e. The licensing function can be delegated by the Minister to a representative body that has its seat within DFAIT but with formal representation – preferably seconded staff – from all concerned government departments and agencies. A review of
section 21 of the Act suggests that there are no restrictions on the Minister's ability to delegate the licensing function.

Licensing fees should be introduced on a cost recovery or any other reasonable basis in the interim in order to reduce the possibility that applications will be lodged with the Minister for activities that have no prospect of success or commercial value and, as well, to mitigate the government's financial burden of in maintaining a licensing unit and its personnel for the implementation of the RSSSA and the Regulations.
Remote Sensing Space Systems Act

S.C. 2005, c. 45

Last amended on April 5, 2007

Current to March 6, 2012

Published by the Minister of Justice at the following address:
http://laws-lois.justice.gc.ca
Subsections 31(1) and (2) of the Legislation Revision and Consolidation Act, in force on June 1, 2009, provide as follows:

31. (1) Every copy of a consolidated statute or consolidated regulation published by the Minister under this Act in either print or electronic form is evidence of that statute or regulation and of its contents and every copy purporting to be published by the Minister is deemed to be so published, unless the contrary is shown.

(2) In the event of an inconsistency between a consolidated statute published by the Minister under this Act and the original statute or a subsequent amendment as certified by the Clerk of the Parliaments under the Publication of Statutes Act, the original statute or amendment prevails to the extent of the inconsistency.

NOTE

This consolidation is current to March 6, 2012. The last amendments came into force on April 5, 2007. Any amendments that were not in force as of March 6, 2012 are set out at the end of this document under the heading “Amendments Not in Force”.

Les paragraphes 31(1) et (2) de la Loi sur la révision et la codification des textes législatifs, en vigueur le 1er juin 2009, prévoient ce qui suit:

31. (1) Tout exemplaire d’une loi codifiée ou d’un règlement codifié, publié par le ministre en vertu de la présente loi sur support papier ou sur support électronique, fait foi de cette loi ou de ce règlement et de son contenu. Tout exemplaire donné comme publié par le ministre est réputé avoir été ainsi publié, sauf preuve contraire.

(2) Les dispositions de la loi d’origine avec ses modifications subséquentes par le greffier des Parlements en vertu de la Loi sur la publication des lois l’emportent sur les dispositions incompatibles de la loi codifiée publiée par le ministre en vertu de la présente loi.

NOTE

Cette codification est à jour au 6 mars 2012. Les dernières modifications sont entrées en vigueur le 5 avril 2007. Toutes modifications qui n’étaient pas en vigueur au 6 mars 2012 sont énoncées à la fin de ce document sous le titre « Modifications non en vigueur ».
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An Act governing the operation of remote sensing space systems

[Assented to 25th November 2005]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

SHORT TITLE

1. This Act may be cited as the Remote Sensing Space Systems Act.

INTERPRETATION

2. The following definitions apply in this Act.

“controlled activity”, subject to subsection 8(6), means any of the following activities in the operation of a remote sensing space system:

(a) formulating or giving a command to a remote sensing satellite of the system;

(b) receiving raw data from a remote sensing satellite of the system;

(c) storing, processing or distributing raw data from the system;

(d) establishing or using
   (i) cryptography in communications with a remote sensing satellite of the system, or
   (ii) information assurance measures for the system.

“information assurance” means the protection of information and information systems by ensuring their availability, integrity, authentication, confidentiality and non-repudiation.

“licence” means a licence issued under subsection 8(1).
“licensed system” means a remote sensing space system for whose operation a licence has been issued.

“licensee” means a person who is the holder of a licence.

“Minister”, subject to section 3, means the Minister of Foreign Affairs.

“person” includes a partnership, a government, a government agency and an unincorporated organization.

“prescribed” means prescribed by the regulations.

“raw data” means sensor data from a remote sensing satellite, and any auxiliary data required to produce remote sensing products from the sensor data, that have not been transformed into a remote sensing product.

“remote sensing product” means an image or data produced from raw data in any way that transforms the raw data.

“remote sensing satellite” means a satellite that is capable of sensing the surface of the Earth through the use of electromagnetic waves.

“remote sensing space system” means (a) one or more remote sensing satellites and the mission control centre and other facilities used to operate the satellites; and (b) the facilities used to receive, store, process or distribute raw data from the satellites, even after the satellites themselves are no longer in operation.

“system participant” means a person who is designated in a licence condition referred to in paragraph 8(5)(b).

“transform”, with respect to raw data, means, having regard to the regulations, to so process them that it is substantially impossible to reconstitute them from the resulting remote sensing product.

té, l’intégrité, l’authentification, la confidentialité et la non-répudiation.

« données brutes » Les données de détection obtenues au moyen d’un satellite de télédétection et les données auxiliaires nécessaires à la production de produits dérivés à partir des données de détection, qui ne sont pas devenues, en raison de leur traitement, des produits dérivés.

« licence » Licence délivrée en vertu du paragraphe 8(1).

« ministre » Sous réserve de l’article 3, le ministre des Affaires étrangères.

« participant autorisé » Personne désignée dans la licence aux termes de l’alinéa 8(5)b).

« personne » Sont compris parmi les personnes les sociétés de personnes, les gouvernements, les organismes gouvernementaux et les organisations non dotées de la personnalité morale.

« produit dérivé » Image ou donnée obtenue par le traitement de données brutes.

« satellite de télédétection » Satellite qui peut faire de la détection de la surface terrestre au moyen d’ondes électromagnétiques.

« système agréé » Système de télédétection spatiale pour lequel une licence d’exploitation a été délivrée.

« système de télédétection spatiale » Système se composant :

a) d’une part, d’un ou de plusieurs satellites de télédétection et du centre de contrôle de mission ainsi que des autres installations utilisées pour exploiter les satellites;

b) d’autre part, des installations utilisées pour la réception, le stockage, le traitement ou la distribution des données brutes obtenues au moyen des satellites, et ce même après qu’ils ne sont plus exploités.

« titulaire de licence » Le détenteur de la licence.

« traitement » Eu égard aux règlements, ce qui a pour effet de rendre substantiellement impossible toute reconstitution des données brutes à partir des produits dérivés obtenus au moyen de celles-ci.
DESIGNATION OF MINISTER

3. The Governor in Council may designate a member of the Queen’s Privy Council for Canada to be the Minister for the purposes of this Act.

APPLICATION OF ACT

4. (1) This Act binds Her Majesty in right of Canada or a province.

(2) The Governor in Council may make an order with respect to a remote sensing space system operated by the Department of National Defence or the Canadian Space Agency providing that this Act and the regulations apply to that system only in the manner and to the extent provided for in the order. The order may adapt any of the provisions of this Act or the regulations for the purposes of that application.

(3) The Minister may, by order, exempt any person or remote sensing space system — or any class of person, system or data — from the application of any provisions of this Act or the regulations. The exemption order may be limited in scope or made subject to conditions. It may be made only if the Minister is satisfied that

(a) the exemption is neither injurious to national security, to the defence of Canada, to the safety of Canadian Forces or to Canada’s conduct of international relations nor inconsistent with Canada’s international obligations;

(b) adequate provision will be made for the protection of the environment, public health and the safety of persons and property; and

(c) the interests of the provinces are protected.

OPERATION OF REMOTE SENSING SPACE SYSTEMS

REQUIREMENT FOR LICENCE

5. No person shall operate a remote sensing space system in any manner, directly or indirectly, except under the authority of a licence.

Activities outside Canada

6. Section 5 applies also to the following persons with respect to their activities outside Canada:

APPLICATION

4. (1) La présente loi lie Sa Majesté du chef du Canada ou d’une province.

(2) Le gouverneur en conseil peut prendre un décret à l’égard d’un système de télédétection spatiale exploité par le ministère de la Défense nationale ou par l’Agence spatiale canadienne selon lequel les dispositions de la présente loi et des règlements ne s’appliquent au système que selon les modalités et dans la mesure prévues par le décret. Celui-ci peut adapter ces dispositions à cette application.

(3) Le ministre peut, par arrêté, soustraire toute personne ou tout système de télédétection spatiale — ou toute catégorie de personnes, de systèmes ou de données — à l’application de tout ou partie de la présente loi ou des règlements, l’exemption pouvant être de portée limitée ou assortie de conditions. Il ne peut accorder l’exemption que s’il est convaincu que les conditions suivantes sont remplies:

(a) l’exemption ne porte pas atteinte à la sécurité nationale, à la défense du Canada, à la sécurité des Forces canadiennes et à la conduite des relations internationales du Canada et n’est pas incompatible avec les obligations internationales du Canada;

(b) les mesures indiquées seront prises pour protéger l’environnement et la santé publique et assurer la sécurité des personnes et des biens;

(c) les intérêts des provinces sont protégés.

EXPLOITATION DES SYSTÈMES DE TÉLÉDÉTECTION SPATIALE

OBLIGATION D’ÊTRE TITULAIRE D’UNE LICENCE

5. Nul ne peut exploiter directement ou indirectement, de quelque manière que ce soit, un système de télédétection spatiale à moins de le faire au titre d’une licence.

Activities menées à l’étranger

6. L’article 5 s’applique aux personnes ci-après en ce qui touche les activités qu’elles mènent à l’étranger:
Remote Sensing Space Systems — March 6, 2012

(a) Canadian citizens;
(b) permanent residents within the meaning of subsection 2(1) of the Immigration and Refugee Protection Act;
(c) corporations that are incorporated or continued under the laws of Canada or a province; and
(d) members of any prescribed class of persons having a substantial connection to Canada related to remote sensing space systems.

Applications, Licences and Related Matters

7. An application to the Minister to issue, amend or renew a licence must be made in the prescribed form and manner, be supported by a proposed system disposal plan, proposed guarantee arrangements referred to in paragraph 9(1)(b) and any other prescribed information, documents and undertakings and be accompanied by any prescribed application fee.

8. (1) On application, the Minister may, having regard to national security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations, Canada’s international obligations and any prescribed factors,

(a) issue a provisional approval of a licence application;
(b) issue a licence; or
(c) amend or renew a licence.

(2) A provisional approval is binding on the Minister for so long as the material facts on which it was based remain substantially unchanged.

(3) The Minister shall, without delay, provide reasons to the applicant for any refusal of an application.

(4) Every licence is subject to the conditions referred to in subsections (5) to (7), any prescribed conditions and the following conditions:

(a) that the licensee keep control of the licensed system;
(b) that the licensee not permit any other person to carry on a controlled activity in the

Délivrance des licences et questions connexes

7. La demande de délivrance, de modification ou de renouvellement de licence se fait selon les modalités réglementaires. Doivent être fournis à l’appui de la demande le plan de disposition du système, les arrangements visés à l’alinéa 9(1)(b) et les renseignements, documents et engagements réglementaires, la demande devant par ailleurs être accompagnée des droits fixés par règlement.

8. (1) Eu égard à la sécurité nationale, à la défense du Canada, à la sécurité des Forces canadiennes, à la conduite des relations internationales du Canada, aux obligations internationales du Canada et aux facteurs réglementaires, le ministre peut, sur demande:

(a) délivrer une approbation provisoire relativement à la demande de licence;
(b) délivrer une licence;
(c) modifier ou renouveler la licence.

(2) L’approbation provisoire lie le ministre tant que les faits importants sur lesquels elle est fondée ne changent pas de façon marquée.

(3) En cas de rejet de la demande, le ministre en fournit sans délai les motifs au demandeur.

(4) Outre les conditions réglementaires et celles visées aux paragraphes (5) à (7), la licence est assortie des conditions suivantes:

(a) le titulaire de la licence contrôle en tout temps le système agréé;
(b) le titulaire de la licence ne peut permettre à quiconque de mener des activités contrôlées en contravention de la licence;
operation of the system except in accordance with the licence;

c) that raw data and remote sensing products from the system about the territory of any country — but not including data or products that have been enhanced or to which some value has been added — be made available to the government of that country within a reasonable time, on reasonable terms and so long as the data or products have not been disposed of, but subject to any licence conditions under subsection (6) or (7) applicable to their communication or provision;

d) that the licensee keep control of raw data and remote sensing products from the system until they are disposed of in accordance with this Act;

e) that raw data from the system be communicated only to a government referred to in paragraph (c), the licensee, a system participant or a person to whom they may be communicated under subsection (6);

(f) that the licensee encourage a recipient of raw data or a remote sensing product who has entered into an agreement referred to in paragraph (6)(b) or (7)(b) to comply with the agreement; and

g) that any prescribed fees be paid when due.

(5) In a licence, the Minister may specify any other condition that the Minister considers appropriate, including any condition

(a) relating to the use of cryptography or information assurance measures; or

(b) designating any person as a system participant and authorizing the licensee to permit that person to carry on any controlled activity in the operation of the licensed system that the Minister specifies.

(6) In a licence, the Minister may authorize the communication of raw data or classes of raw data from the licensed system to any persons or classes of persons other than the licensee or system participants on any conditions that the Minister considers appropriate. The conditions may include requirements that, in

c) les données brutes et les produits dérivés obtenus au moyen du système — exception faite des données et des produits qui ont été améliorés ou auxquels une valeur a été ajoutée — sont, dans un délai et selon des conditions raisonnables, et ce tant qu’il n’en a pas été disposé, mis à la disposition du gouvernement du pays dont le territoire a fait l’objet de la télédétection spatiale, sous réserve de toute condition de la licence applicable au titre des paragraphes (6) ou (7) à la communication des données et à la fourniture des produits;

d) le titulaire de la licence contrôle les données brutes et les produits dérivés obtenus au moyen du système jusqu’à ce qu’il en soit disposé conformément à la présente loi;

e) les données brutes obtenues au moyen du système ne sont communiquées qu’au gouvernement visé à l’alinéa c), au titulaire de la licence, au participant autorisé ou à la personne à qui elles peuvent être communiquées au titre du paragraphe (6);

f) le titulaire de la licence engage le destinataire des données brutes ou des produits dérivés à se conformer aux dispositions de l’accord visé aux alinéas (6)b) ou (7)b);

g) les droits réglementaires sont acquittés au moment opportun.
specified cases or circumstances, the communication of the raw data

(a) be subject to the Minister’s prior approval; or

(b) be done only under a legally enforceable agreement, entered into in good faith, that includes measures respecting their security or their further communication.

The receipt, communication, processing or storage of raw data by such persons is not a controlled activity.

(7) In a licence, 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. The conditions may include requirements that, in specified cases or circumstances, the provision of the remote sensing products

(a) be subject to the Minister’s prior approval; or

(b) be done only under a legally enforceable agreement, entered into in good faith, that includes measures respecting their security or their further provision.

(8) A licence is valid for the period that the Minister considers appropriate and specifies in it.

(9) A licence is not transferable without the Minister’s consent.

(10) The Statutory Instruments Act does not apply to a licence.

9. (1) The Minister may not issue a licence without having approved

(a) a system disposal plan for the licensed system satisfactory to the Minister that, among other things, provides for the protection of the environment, public health and the safety of persons and property; and

(b) arrangements satisfactory to the Minister relating to the guarantee of the performance of the licensee’s obligations under the system disposal plan.
Obligations regarding plan and arrangements

(2) A licensee and, in the case of a licence that has terminated, the former licensee, shall
(a) ensure that the following things are disposed of in accordance with the system disposal plan approved by the Minister:
(i) every system satellite,
(ii) the things used in connection with the cryptography and information assurance measures of the system,
(iii) any raw data and remote sensing products from the system that are under the control of the licensee or former licensee, and
(iv) anything else prescribed; and
(b) put into effect the guarantee arrangements approved by the Minister under paragraph (1)(b) and keep them in effect until the system disposal plan has been carried out.

Obligations relatives au plan et aux arrangements

(2) Le titulaire de la licence — ou, en cas d’expiration de celle-ci, l’ancien titulaire — est tenu:
(a) de disposer, conformément aux mesures prévues dans le plan de disposition du système agréé approuvé par le ministre:
(i) de tout satellite faisant partie du système,
(ii) des choses employées dans le cadre de l’application des procédés de cryptographie et des mesures d’assurance de l’information relativement au système,
(iii) des données brutes et des produits dérivés obtenus au moyen du système qui sont sous son contrôle,
(iv) de toute autre chose visée par règlement;
(b) de mettre en œuvre les arrangements approuvés par le ministre au titre de l’alinéa (1)b) et de les maintenir en vigueur jusqu’à exécution complète du plan.

Amendment of system disposal plan or arrangements

(3) The Minister may, if the Minister is satisfied that it is desirable to do so, having regard to national security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations, Canada’s international obligations and the protection of the environment, public health and the safety of persons and property and any prescribed factors,
(a) on application, amend a system disposal plan or the guarantee arrangements approved by the Minister under paragraph (1)(b); or
(b) on the Minister’s own initiative, on first giving notice to the licensee or former licensee that provides a reasonable opportunity to make representations, amend a system disposal plan.

Modification du plan de disposition et des arrangements

(3) S’il est convaincu que cela est souhaitable eu égard à la sécurité nationale, à la défense du Canada, à la sécurité des Forces canadiennes, à la conduite des relations internationales du Canada, aux obligations internationales du Canada, à la protection de l’environnement et de la santé publique, à la sécurité des personnes et des biens et aux facteurs réglementaires, le ministre peut:
(a) sur demande, modifier le plan de disposition du système agréé ou les arrangements qu’il a approuvés au titre de l’alinéa (1)b);
(b) de sa propre initiative, modifier le plan sur avis accordant d’abord au titulaire ou à l’ancien titulaire de la licence la possibilité de présenter ses observations.

Amendment, Suspension and Cancellation of Licences

10. (1) The Minister may on the Minister’s own initiative, if the Minister is satisfied that the amendment is desirable, having regard to national security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations, Canada’s international obligations and any prescribed factors, amend a licence with respect to any condition contemplated by any of subsections 8(5) to (7).

Modification, suspension et révocation des licences

10. (1) S’il est convaincu que cela est souhaitable eu égard à la sécurité nationale, à la défense du Canada, à la sécurité des Forces canadiennes, à la conduite des relations internationales du Canada, aux obligations internationales du Canada et aux facteurs réglementaires, le ministre peut, de sa propre initiative, modifier la licence relativement à toute condition visée à l’un des paragraphes 8(5) à (7).
Amendment — s. 8(5)
(2) If the amendment concerns a condition contemplated by subsection 8(5), the Minister must first give to the licensee notice of the proposed amendment and a reasonable opportunity to make representations regarding it.

Amendment — s. 8(6) or (7)
(3) An amendment concerning a condition contemplated by subsection 8(6) or (7) may be effective immediately on notice to the licensee, but the Minister shall give to the licensee an opportunity — during a period of 15 days after the notice or any longer period that the Minister specifies — to make representations regarding it.

Suspension of licence
11. (1) The Minister may suspend a licence in whole or in part for a period of up to 90 days if the Minister is satisfied that the continued operation of a licensed system is likely to be
(a) injurious to national security, the defence of Canada, the safety of Canadian Forces or Canada’s conduct of international relations; or
(b) inconsistent with Canada’s international obligations.

The suspension may be effective immediately on notice to the person, but the Minister shall, in the notice, set out the reasons for the suspension and give to the person an opportunity — during a period of 15 days after the notice or any longer period that the Minister specifies — to make representations regarding it.

Extension of suspension
(2) If the licence is suspended for less than 90 days, the Minister may extend the suspension for any further period or periods to a maximum total of 90 days if the Minister is satisfied that there continues to be a reason for the suspension under subsection (1).

Further automatic extension of suspension
(3) If the Minister gives notice of a proposed cancellation before the suspension expires, the suspension continues, unless the Minister earlier ends it, until the end of the period for making representations regarding the proposed cancellation.

Cancellation of licence
12. The Minister may cancel a licence if it is suspended and a reason for the suspension continues to exist or if, at any time, the Minister is otherwise satisfied, having regard to national

Modification — par. 8(5)
(2) Dans le cas d’une condition visée au paragraphe 8(5), le ministre donne d’abord avis de la mesure au titulaire de la licence et lui accorde la possibilité de présenter ses observations.

Modification — par. 8(6) ou (7)
(3) Dans le cas d’une condition visée aux paragraphes 8(6) ou (7), le ministre donne avis de la mesure au titulaire de la licence et lui accorde la possibilité de présenter ses observations dans les quinze jours suivant l’avis ou dans le délai plus long qu’il précise. L’avis peut avoir un effet immédiat.

Suspension de la licence
11. (1) Le ministre peut suspendre tout ou partie de la licence pour une période maximale de quatre-vingt-dix jours si il est convaincu que la poursuite de l’exploitation du système agréé, selon le cas :

a) portera vraisemblablement atteinte à la sécurité nationale, à la défense du Canada, à la sécurité des Forces canadiennes ou à la conduite des relations internationales du Canada;

b) sera vraisemblablement incompatible avec les obligations internationales du Canada.

Il donne au titulaire de la licence un avis motivé de la suspension et lui accorde la possibilité de présenter ses observations dans les quinze jours suivant l’avis ou dans le délai plus long qu’il précise. L’avis peut avoir un effet immédiat.

Prolongation de la suspension
(2) Dans le cas où il a suspendu la licence pour une période de moins de quatre-vingt-dix jours, le ministre peut prolonger la suspension d’une ou de plusieurs périodes portant la suspension à quatre-vingt-dix jours au plus s’il est convaincu qu’il y a encore motif à suspension.

Prolongation automatique de la suspension
(3) Si, avant l’expiration de la période de suspension, le ministre donne avis de son intention de révoquer la licence, la suspension est maintenue, à moins qu’il n’y mette fin avant, jusqu’à l’expiration de la période prévue pour la présentation d’observations concernant la révocation.

Révocation de la licence
12. Le ministre peut révoquer la licence suspendue tant qu’il y a motif à suspension ou toute licence dont il est convaincu qu’elle devrait être révoquée eu égard à la sécurité natio-
security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations, Canada’s international obligations and any prescribed factors, that the licence ought to be cancelled. But the Minister shall first give to the licensee notice of the reasons for the proposed cancellation and an opportunity — during a period of 45 days after the notice or any longer period that the Minister specifies — to make representations regarding it.

13. (1) The Minister may make an order requiring a person whose licence is suspended or cancelled or has expired to take any measures related to the operation of the remote sensing space system that the Minister considers advisable, having regard to

(a) national security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations and Canada’s international obligations; and

(b) the system disposal plan, including its provisions for the protection of the environment, public health and the safety of persons and property.

The order may be effective immediately on notice to the person, but the Minister shall give to the person an opportunity — during a period of 15 days after the notice or any longer period that the Minister specifies — to make representations regarding it.

(2) The Statutory Instruments Act does not apply to an order made under this section.

14. (1) The Minister may make an order requiring a licensee to interrupt or restrict, for the period specified in the order, any operation, including the provision of any service, of the licensed system if the Minister believes on reasonable grounds that the continuation of that operation would be injurious to Canada’s conduct of international relations or inconsistent with Canada’s international obligations.

(2) The Minister of National Defence may make an order requiring a licensee to interrupt or restrict, for the period specified in the order, any operation, including the provision of any service, of the licensed system if the Minister
of National Defence believes on reasonable grounds that the continuation of that operation would be injurious to the defence of Canada or the safety of Canadian Forces.

(3) The *Statutory Instruments Act* does not apply to an order made under this section.

(4) If the minister making an order under subsection (1) or (2) is satisfied that the substance of the order ought not to be disclosed for the same reasons as those on which the order is founded, that minister may include in the order a direction that no person shall disclose its substance to any other person except as required by law or as necessary to give it effect.

(5) An order made under this section may take effect immediately on notice to the licensee, but the minister making the order shall give to the licensee an opportunity — during a period of 15 days after the notice or any longer period that the minister specifies — to make representations regarding it.

15. (1) The Minister may make an order requiring a licensee to provide to Her Majesty in right of Canada any service through the licensed system that the Minister believes on reasonable grounds is desirable for the conduct of international relations or the performance of Canada’s international obligations.

(2) The Minister of National Defence may make an order requiring a licensee to provide to Her Majesty in right of Canada any service through the licensed system that the Minister believes on reasonable grounds is desirable for the defence of Canada or the safety of Canadian Forces.

(3) The Minister of Public Safety and Emergency Preparedness may make an order requiring a licensee to provide any service through the licensed system

(a) to the Royal Canadian Mounted Police that that minister believes on reasonable grounds is desirable for the fulfilment of its members’ responsibilities under subsection 6(1) of the *Security Offences Act*;

(b) to the Royal Canadian Mounted Police that the Minister of National Defence believes on reasonable grounds is desirable for the performance of Canada’s international obligations;
(b) to the Canadian Security Intelligence Service that that minister believes on reasonable grounds is desirable for the fulfilment of its duties and functions under the Canadian Security Intelligence Service Act; or

(c) to Her Majesty in right of Canada that that minister believes on reasonable grounds is desirable for critical infrastructure protection or emergency preparedness.

Details of orders

(4) An order made under this section must specify the period during which the service is to be provided and may specify how and with what priority it is to be provided.

(5) The Statutory Instruments Act does not apply to an order made under this section.

Non-application of Statutory Instruments Act

(6) If the minister making an order is satisfied that the substance of the order ought not to be disclosed for the same reasons as those on which the order is founded, that minister may include in the order a direction that no person shall disclose its substance to any other person except as required by law or as necessary to give it effect.

(7) An order made under this section may take effect immediately on notice to the licensee, but the minister making the order shall give to the licensee an opportunity — during a period of 15 days after the notice or any longer period that the minister specifies — to make representations regarding it.

2005, c. 45, ss. 15, 46.

Transfer of Remote Sensing Satellites

16. (1) No licensee or former licensee shall permit a command to a remote sensing satellite of the remote sensing space system for which the licence was issued to be given from outside Canada or by any other person unless the licensee or former licensee

(a) can override the command from Canada; or

(b) has obtained the approval of the Minister.

16. (1) Le titulaire ou l’ancien titulaire d’une licence ne peut permettre qu’une commande soit donnée, à l’étranger ou par une autre personne, à un satellite de télédétection faisant partie du système de télédétection spatiale à l’égard duquel la licence a été délivrée, sauf dans les cas suivants :

a) il peut prendre des mesures de surpassement à l’égard d’une telle commande à partir du Canada;

b) il a obtenu l’approbation du ministre.
Factors for approval

(2) In deciding whether to give an approval, the Minister shall have regard to national security, the defence of Canada, the safety of Canadian Forces, Canada’s conduct of international relations, Canada’s international obligations and any prescribed factors.

(2) Pour décider s’il y a lieu de donner son approbation, le ministre prend en considération ce qui suit : la sécurité nationale, la défense du Canada, la sécurité des Forces canadiennes, la conduite des relations internationales du Canada, les obligations internationales du Canada et les facteurs réglementaires.

Inspection

Designation of inspectors

17. (1) The Minister may designate as inspectors for the purposes of this Act persons or classes of persons that the Minister considers qualified.

17. (1) Pour l’application de la présente loi, le ministre peut désigner à titre d’inspecteur toute personne — soit individuellement, soit au titre de son appartenance à une catégorie donnée — qu’il estime qualifiée.

Certificate

(2) Every inspector is to be provided with a certificate attesting to their designation, and shall, at the request of any person appearing to be in charge of any place entered by the inspector, present the certificate to the person.

(2) L’inspecteur reçoit un certificat attestant sa qualité qu’il présente, sur demande, à toute personne apparemment responsable du lieu visité.

Powers of inspectors

18. (1) Inspectors may, in carrying out their duties and functions,

(a) subject to subsection (2), enter and inspect, at any reasonable time, any place owned by or under the control of a licensee, a system participant or any other person who the inspector reasonably believes may be carrying on a controlled activity in the operation of a remote sensing space system, and in which the inspector believes on reasonable grounds there is any document, information or thing relevant to the administration or enforcement of this Act;

(b) examine any document, information or thing at the place or remove it for examination or copying;

(c) inspect any equipment at the place related to the operation of a remote sensing space system and perform tests of it;

(d) use or cause to be used any data processing system at the place to examine any data contained in or available to the system;

(e) reproduce any record from those data or cause it to be reproduced from them in the form of a printout or other intelligible output and remove the printout or other output for examination or copying; and

(f) use or cause to be used any copying equipment or means of communication located at the place.

18. (1) L’inspecteur peut, dans le cadre de ses fonctions :

a) sous réserve du paragraphe (2), procéder, à toute heure convenable, à la visite de tout lieu appartenant au titulaire de licence, au participant autorisé ou à toute autre personne qui, à son avis fondé sur des motifs raisonnables, mène des activités contrôlées dans le cadre de l’exploitation d’un système de télédétection spatiale — ou de tout lieu placé sous leur responsabilité — où il croit, pour des motifs raisonnables, se trouver des documents, renseignements ou choses utiles à l’exécution ou au contrôle d’application de la présente loi;

b) examiner les documents, renseignements et choses s’y trouvant, et les emporter pour examen et reproduction;

c) examiner le matériel s’y trouvant qui est lié à l’exploitation du système de télédétection spatiale et procéder à des essais;

d) utiliser ou faire utiliser tout système informatique s’y trouvant pour examiner les données qu’il contient ou auxquelles il donne accès;

e) à partir de ces données, reproduire ou faire reproduire tout document sous forme d’imprimé ou toute autre forme intelligible qu’il peut emporter pour examen ou reproduction;
(2) An inspector may not enter a dwelling-place except with the consent of the occupant or under the authority of a warrant issued under subsection (3).

(3) On ex parte application, a justice, as defined in section 2 of the Criminal Code, may issue a warrant authorizing an inspector named in the warrant to enter a dwelling-place, subject to any conditions specified in the warrant, if the justice is satisfied by information on oath that

- the dwelling-place is a place described in paragraph (1)(a);
- entry to the dwelling-place is necessary for any purpose relating to the administration or enforcement of this Act; and
- entry has been refused, there are reasonable grounds for believing that entry will be refused or consent to entry cannot be obtained from the occupant.

(4) An inspector executing a warrant issued under subsection (3) shall not use force unless the inspector is accompanied by a peace officer and the use of force has been specifically authorized in the warrant.

(5) The owner or other person in charge of a place entered by an inspector under this section shall give the inspector all reasonable assistance in the power of that person and furnish the inspector with any information that the inspector reasonably requires.

(6) No person shall, with respect to an inspector engaged in carrying out their duties and functions,

- wilfully obstruct or hinder the inspector; or
- knowingly make or provide to the inspector any false or misleading statement or information.

REQUESTS FOR INFORMATION

19. (1) The Minister may send a notice to any person who the Minister believes on reasonable grounds has any information or document relevant to the administration or enforce-

f) utiliser ou faire utiliser le matériel de reproduction et les moyens de communication du lieu.

(2) L’inspecteur ne peut toutefois procéder à la visite d’un local d’habitation sans l’autorisation de l’occupant que s’il est muni d’un mandat.

(3) Sur demande ex parte, le juge de paix, au sens de l’article 2 du Code criminel, peut délivrer un mandat autorisant, sous réserve des conditions fixées, l’inspecteur qui y est nommé à procéder à la visite d’un local d’habitation s’il est convaincu, sur la foi d’une dénonciation faite sous serment, que sont réunis les éléments suivants :

- les circonstances prévues à l’alinéa (1)(a) existent;
- la visite est nécessaire à l’exécution ou au contrôle d’application de la présente loi;
- soit un refus a été opposé à la visite, ou il y a des motifs raisonnables de croire que tel sera le cas, soit il n’est pas possible d’obtenir le consentement de l’occupant.

(4) L’inspecteur ne peut recourir à la force dans l’exécution du mandat que si celui-ci en autorise expressément l’usage et que s’il est accompagné d’un agent de la paix.

(5) Le propriétaire ou le responsable du lieu visité est tenu de prêter à l’inspecteur toute l’assistance possible et de lui donner les renseignements qu’il peut valablement exiger.

(6) Il est interdit :

- d’entraver volontairement l’action de l’inspecteur dans l’exercice de ses fonctions;
- de lui faire sciemment une déclaration fausse ou trompeuse ou de lui fournir des renseignements faux ou trompeurs.

DEMANDE DE RENSEIGNEMENTS

19. (1) Le ministre peut demander, par avis, à toute personne qu’il croit, pour des motifs raisonnables, être en possession de renseignements ou de documents utiles à l’exécution ou
ment of this Act, requesting the person to provide that information or document, within any reasonable period that the Minister specifies, to the Minister or any person whom the Minister designates.

(2) If a person objects to providing or fails to provide the Minister or a designated person, as the case may be, with any requested information or document within the specified period, the Minister may apply to a judge of a superior court of a province or of the Federal Court for an order requiring the person to provide it.

(3) The Minister shall give the person at least seven days notice of the hearing of the application.

(4) On hearing the application, the judge may order the person to provide the information or documents if the judge concludes that providing them is necessary for any purpose relating to the administration or enforcement of this Act and that the public interest in having the information or documents provided outweighs in importance any other interest, including privacy interest, of the person.

REGULATIONS

20. (1) On the recommendation of the Minister, the Governor in Council may make regulations

(a) prescribing a process or series of processes that is or is not to be considered to transform raw data;

(b) prescribing classes of persons for the purpose of paragraph 6(d);

(c) respecting the issuance, amendment and renewal of licences, including

(i) prescribing the manner and form of making applications,

(ii) respecting information, documents or undertakings — including the system disposal plan and arrangements referred to in subsection 9(1) — to be provided in support of applications,

(iii) prescribing fees for applications or the manner of calculating them,

(iv) respecting security assessments of proposed or actual licensees or system participants, and

au contrôle d’application de la présente loi, de les lui communiquer ou de les communiquer à la personne qu’il désigne, et ce dans le délai raisonnable précisé dans l’avis.

(2) Si la personne refuse ou omet de s’exécuter dans le délai précisé, le ministre peut demander à un juge de la cour supérieure d’une province, ou de la Cour fédérale, de lui ordonner d’effectuer la communication des renseignements ou des documents.

(3) Le ministre donne à l’intéressé un préavis d’au moins sept jours de l’audition de la demande.

(4) Le juge saisi de la demande peut rendre l’ordonnance s’il conclut que la communication des renseignements ou documents est nécessaire à l’exécution ou au contrôle d’application de la présente loi et que l’intérêt public l’emporte sur les droits de l’intéressé, notamment son droit à la vie privée.

RÈGLEMENTS

20. (1) Sur recommandation du ministre, le gouverneur en conseil peut, par règlement:

(a) préciser les opérations et séries d’opérations qui sont considérées comme étant ou non des traitements de données brutes;

(b) préciser les catégories de personnes pour l’application de l’alinéa 6(d);

(c) régir la délivrance, la modification et le renouvellement des licences, et notamment :

(i) prévoir les modalités de présentation des demandes,

(ii) régir les renseignements, documents ou engagements — notamment le plan de disposition du système et les arrangements visés au paragraphe 9(1) — à fournir à l’appui des demandes,

(iii) établir les droits à acquitter à l’égard des demandes, ou leur mode de calcul,

(iv) régir l’évaluation de sécurité des titulaires de licence et des participants autorisés, actuels et éventuels,
(v) prescribing conditions of licences;
(d) requiring notice of any change — of which the licensee has knowledge — in any information that has been provided in connection with an application;
(e) respecting the suspension or cancellation of licences;
(f) respecting the operation of licensed systems;
(g) requiring periodic or special reports concerning licensed systems;
(g.1) respecting the archiving of raw data, including the public access to the archived data;
(h) respecting the keeping of records;
(i) prescribing fees, including periodic fees, for a licence, or the manner of calculating those fees, and when they are to be paid;
(j) respecting the determination of amounts that may be paid under subsection 22(2);
(k) for carrying out sections 23 and 25, including
   (i) designating any provision of this Act or of any regulation, order or direction made under this Act or any requirement of such a provision or any condition or class of conditions of a licence or provision or class of provisions of a system disposal plan as a provision, requirement or condition whose contravention may be proceeded with as a violation,
   (ii) prescribing the maximum administrative monetary penalty for a particular violation, which maximum may not exceed $5,000, in the case of an individual, and $25,000, in any other case,
   (iii) prescribing criteria to be taken into account in determining the amount of a proposed penalty,
   (iv) respecting compliance agreements, and
   (v) respecting appeals;
(l) respecting the giving or service of notices under this Act;
(m) respecting the making of representations under this Act;

(v) prévoir les conditions dont sont assorties les licences;
d) exiger notification de tout changement dont les titulaires de licence ont connaissance à l’égard des renseignements fournis relativement aux demandes;
e) régir la suspension et la révocation des licences;
f) régir l’exploitation des systèmes agréés;
g) exiger la fourniture de rapports périodiques ou spéciaux concernant les systèmes agréés;
g.1) régir l’archivage des données brutes ainsi que l’accès du public à celles-ci;
h) régir la tenue des registres;
i) prévoir les droits périodiques et autres à acquitter à l’égard des licences, ou leur mode de calcul, et le moment de leur exigibilité;
j) régir la fixation des sommes pouvant être versées au titre du paragraphe 22(2);
k) prévoir les mesures d’application des articles 23 et 25, et notamment:
   (i) désigner comme texte dont la contravention constitue une violation toute disposition de la présente loi ou de ses textes d’application, toute obligation imposée par celle-ci ou ses textes, toute condition — ou catégorie de conditions — d’une licence ou toute mesure — ou catégorie de mesures — du plan de disposition d’un système agrément,
   (ii) prévoir le montant maximal — plafonné, dans le cas des personnes physiques, à 5 000 $ et, dans les autres cas, à 25 000 $ — de la pénalité applicable à chaque violation,
   (iii) prévoir les critères à prendre en compte pour la détermination du montant de la pénalité en cause,
   (iv) régir les transactions,
   (v) régir les appels;
l) régir la façon de donner ou de signifier les avis, préavis et procès-verbaux prévus par la présente loi;
m) régir la présentation d’observations au titre de la présente loi;
Regulations may vary

Incorporation by reference

(2) Regulations made under subsection (1) may vary according to any criterion or combination of criteria or by class of remote sensing space system, operator or activity.

(3) For greater certainty, a regulation made under subsection (1) incorporating by reference any classifications, standards, procedures, specifications or rules may incorporate them as they are amended from time to time.

Incorporation by reference

DELEGATION

Minister

21. (1) The Minister

(a) may not delegate the exercise of the Minister’s powers under subsection 4(3) or 14(1);

(b) may delegate only to his or her deputy minister the exercise of the Minister’s powers under subsection 15(1); and

(c) may delegate to any officer or class of officers — or, with the consent of the Minister of National Defence, a member or class of members of the Canadian Forces — the exercise of any other powers of the Minister under this Act.

Minister of National Defence

(2) The Minister of National Defence

(a) may not delegate the exercise of that minister’s powers under subsection 14(2); and

(b) may delegate only to his or her deputy minister or the Chief of the Defence Staff the exercise of that minister’s powers under subsection 15(2).

Minister of Public Safety and Emergency Preparedness

(3) The Minister of Public Safety and Emergency Preparedness may delegate only to

(a) the Commissioner of the Royal Canadian Mounted Police the exercise of that minister’s powers under paragraph 15(3)(a); and

(b) the Director of the Canadian Security Intelligence Service the exercise of that minister’s powers under paragraph 15(3)(b); and

n) prendre toute autre mesure d’ordre réglementaire prévue par la présente loi;

o) prendre toute autre mesure d’application de la présente loi.

(2) Les règlements peuvent varier en fonction de certains critères ou des catégories de systèmes de télédétection spatiale, d’exploitants ou d’activités.

(3) Il est entendu qu’il peut être précisé, dans le règlement qui incorpore des classifications, normes, modalités, spécifications ou règles, qu’elles sont incorporées avec leurs modifications successives.

Ministre

21. (1) Le ministre :

a) ne peut pas déléguer les pouvoirs prévus aux paragraphes 4(3) et 14(1);

b) ne peut déléguer les pouvoirs prévus au paragraphe 15(1) qu’au sous-ministre;

c) peut déléguer ses autres pouvoirs à tout fonctionnaire ou, avec l’accord du ministre de la Défense nationale, à tout membre des Forces canadiennes, soit individuellement, soit au titre de son appartenance à une catégorie donnée.

Ministre de la Défense nationale

(2) Le ministre de la Défense nationale :

a) ne peut pas déléguer les pouvoirs prévus au paragraphe 14(2);

b) ne peut déléguer les pouvoirs prévus au paragraphe 15(2) qu’au sous-ministre ou au chef d’état-major de la défense.

Ministre de la Sécurité publique et de la Protection civile

(3) Le ministre de la Sécurité publique et de la Protection civile ne peut déléguer :

a) les pouvoirs prévus à l’alinéa 15(3)a) qu’au commissaire de la Gendarmerie royale du Canada;

b) les pouvoirs prévus à l’alinéa 15(3)b) qu’au directeur du Service canadien du renseignement de sécurité;
(c) the Deputy Minister of Public Safety and Emergency Preparedness the exercise of that minister’s powers under paragraph 15(3)(c).

2005, c. 45, ss. 21, 46.

NO LIABILITY

22. (1) No person is entitled to financial compensation from Her Majesty in right of Canada for any financial losses resulting from any of the following actions taken in good faith: the amendment of a system disposal plan or arrangements under subsection 9(3); the amendment of a licence under section 10; the suspension of a licence under section 11; the cancellation of a licence under section 12; or, the making of an order under section 13, 14 or 15.

(2) A minister may pay a licensee an amount determined in accordance with the regulations for the service provided as a result of an order made by that minister under section 15.

ADMINISTRATIVE MONETARY PENALTIES

23. Every person who contravenes a provision, requirement or condition designated under subparagraph 20(1)(k)(i) commits a violation and is liable to an administrative monetary penalty not exceeding the maximum prescribed or, if no maximum has been prescribed, to a penalty not exceeding $5,000, in the case of an individual, and $25,000, in any other case.

ENFORCEMENT OFFICERS

24. (1) The Minister may designate as enforcement officers for the purposes of this Act persons or classes of persons that the Minister considers qualified.

(2) Enforcement officers are to receive a certificate attesting to their designation and shall, on demand, present the certificate to any person from whom they request information in the course of their duties or functions.

(3) Every enforcement officer is, in carrying out their duties and functions, an inspector.

VIOLATIONS ET PÉNALITÉS

23. Toute contravention à un texte désigné sous le régime du sous-alinéa 20(1)(k)(i) constitue une violation pour laquelle le contrevenant s’expose à une pénalité dont le maximum peut être prévu par règlement; à défaut, la pénalité maximale est de 5 000 $ dans le cas des personnes physiques et de 25 000 $ dans les autres cas.

AGENTS VERBALISATEURS

24. (1) Pour l’application de la présente loi, le ministre peut désigner à titre d’agent verbalisateur toute personne — soit individuellement, soit au titre de son appartenance à une catégorie donnée — qu’il estime qualifiée.

(2) Chaque agent reçoit un certificat attestant sa qualité qu’il présente sur demande à la personne à qui il demande des renseignements.

(3) Pour l’exercice de ses attributions, l’agent est un inspecteur.
NOTICES OF VIOLATION

25. (1) If an enforcement officer believes on reasonable grounds that a person has committed a violation, the officer may issue, and shall cause to be served on the person, a notice of violation.

25. (1) L’agent verbalisateur qui a des motifs raisonnables de croire qu’une violation a été commise peut dresser un procès-verbal qu’il fait signifier à l’auteur présumé.

Contents of notice

(a) name the person believed to have committed a violation;

(b) identify the violation;

(c) set out the penalty that the enforcement officer proposes to impose;

(d) inform the person that they may, within 30 days after the notice is served or within any longer period specified in the notice, either pay the penalty set out in the notice or make representations to the officer with respect to the alleged violation or proposed penalty — including any representations about entering into a compliance agreement — and set out the manner for doing so; and

(e) inform the person that, if they do not pay the penalty or make representations in accordance with the notice, they will be considered to have committed the violation and the officer may impose a penalty in respect of it.

Criteria for penalty

(a) the degree of intention or negligence on the part of the person who committed the violation;

(b) the harm done by the violation;

(c) the person’s history of prior violations or convictions under this Act during the five-year period immediately before the violation;

(d) any prescribed criteria; and

(e) any other relevant matter.

DETERMINATION OF RESPONSIBILITY AND PENALTY

Payment of Penalty

26. If the person pays the penalty proposed in the notice of violation, the person is consid-

Procès-verbaux

25. (1) L’agent verbalisateur qui a des motifs raisonnables de croire qu’une violation a été commise peut dresser un procès-verbal qu’il fait signifier à l’auteur présumé.

(2) Le ministre détermine la forme et la te

Contenu

nueur des procès-verbaux de violation. Tout procès-verbal mentionne :

(a) le nom de l’auteur présumé de la violation;

(b) les faits reprochés;

(c) la pénalité que l’agent a l’intention de lui imposer;

(d) la faculté qu’il a soit de payer la pénalité, soit de présenter des observations à l’agent relativement à la violation ou à la pénalité — y compris en ce qui touche la conclusion d’une transaction —, et ce dans les trente jours suivant la signification du procès-verbal ou dans le délai plus long précisé dans celui-ci, ainsi que les modalités d’exercice de cette faculté;

(e) le fait que le non-exercice de cette faculté vaut aveu de responsabilité et permet à l’agent d’imposer la pénalité.

Payment

26. Le paiement de la pénalité mentionnée au procès-verbal vaut aveu de responsabilité à l’égard de la violation et met fin à la procédure.


Making Representations

27. (1) If the person alleged to have committed a violation makes representations, the enforcement officer shall either

(a) enter into a compliance agreement with the person on behalf of the Minister; or

(b) decide on a balance of probabilities whether the person committed the violation and, if so, impose the penalty proposed, a lesser penalty or no penalty, taking into account the matters mentioned in subsection 25(3).

The enforcement officer shall cause notice of any decision made under paragraph (b) to be issued and served on the person together with notice of the person’s right of appeal under subsection 29(1).

(2) In the course of the making of representations, an enforcement officer may, on behalf of the Minister, enter into a compliance agreement with the person alleged to have committed a violation on any terms that the officer considers satisfactory. The terms

(a) must provide for payment by the person to the Receiver General of a specified amount not greater than the penalty proposed in the notice of violation if the person does not comply with the agreement; and

(b) may provide for the giving of reasonable security, in a form and an amount that the officer considers satisfactory, for the person’s performance of the agreement.

(3) Entry into a compliance agreement ends the violation proceedings and precludes any further violation or offence proceedings in relation to the act or omission in question.

(4) The Minister may issue and serve a notice of default on a person who has entered into a compliance agreement but has not complied with it. On service of the notice, the person is liable to pay without delay the amount provided for in the agreement, failing which, the Minister may realize or enforce any security for the person’s performance of the agreement.

Présentation des observations

27. (1) Si l’auteur présumé de la violation lui présente des observations, l’agent verbalisateur :

a) soit conclut avec lui une transaction au nom du ministre;

b) soit détermine, selon la prépondérance des probabilités, sa responsabilité et, le cas échéant, lui impose la pénalité mentionnée au procès-verbal ou une pénalité réduite, ou encore n’impose aucune pénalité, compte tenu des éléments énumérés au paragraphe 25(3).

Il lui fait signifier avis de la décision prise au titre de l’alinéa b) et l’informe par la même occasion de son droit d’interjeter appel au titre du paragraphe 29(1).

(2) Dans le cadre de la présentation d’observations, l’agent peut, au nom du ministre, conclure avec l’auteur présumé de la violation une transaction — assortie des modalités qu’il estime indiquées — qui :

a) exige de l’auteur qu’il verse au receveur général une somme ne pouvant dépasser le montant de la pénalité mentionné au procès-verbal s’il ne se conforme pas aux modalités de la transaction;

b) peut prévoir la fourniture d’une sûreté raisonnable — dont le montant et la nature doivent agréer à l’agent — en garantie de l’exécution de la transaction.

(3) La conclusion de la transaction met fin à la procédure et fait obstacle à toute autre procédure en violation ou procédure pénale à l’égard de l’acte ou de l’omission en cause.

(4) Le cas échéant, le ministre peut signifier à l’intéressé un avis du défaut d’exécution de la transaction, et celui-ci paie sans délai la somme prévue aux termes de la transaction, à défaut de quoi le ministre peut réaliser la sûreté.
### Responsibility

28. A person who neither pays the penalty nor makes representations in accordance with the notice of violation is considered to have committed the violation, and the enforcement officer shall impose the penalty proposed and notify the person of it.

### Aveu de responsabilité

28. Vaut aveu de responsabilité le non-exercice de la faculté prévue par le procès-verbal — paiement de la pénalité ou présentation d’observations — selon les termes de celui-ci. Le cas échéant, l’agent verbalisateur impose la pénalité mentionnée au procès-verbal et en donne avis à l’intéressé.

### Appeal to Minister

Right of appeal

29. (1) A person served with notice of a decision made under paragraph 27(1)(b) may, within 30 days after the notice is served, or within any longer period that the Minister allows, appeal the decision to the Minister.

(2) On an appeal, the Minister may confirm, set aside or vary the decision of the enforcement officer.

### Appele au ministe

Droit d’appel

29. (1) Il peut être interjeté appel auprès du ministre de la décision prise en vertu de l’alinéa 27(1)b), dans les trente jours suivant sa signification ou dans le délai supérieur que celui-ci peut accorder.

(2) Le cas échéant, le ministre confirme, annule ou modifie la décision.

### Rules about Violations

#### Vicarious liability — acts of employees, agents and mandataries

30. A person is liable for a violation that is committed by the person’s employee acting in the course of the employment or the person’s agent or mandatary acting within the scope of their authority, whether or not the employee, agent or mandatary who actually committed the violation is identified or proceeded against.

#### Due diligence

31. Due diligence is a defence in a proceeding in relation to a violation.

#### Continuing violation

32. A violation that is committed or continued on more than one day constitutes a separate violation for each day on which it is committed or continued.

#### Limitation period

33. Any proceedings in respect of a violation may be instituted at any time within, but not later than, two years after the time when the subject-matter of the proceedings arose.

#### Violation or offence

34. (1) If it is possible to proceed with any act or omission as a violation and it is also possible to proceed with it as an offence, proceeding in one manner precludes proceeding in the other.

(2) For greater certainty, a violation is not an offence and, accordingly, section 126 of the Criminal Code does not apply in respect of one.
**Admissibility of documents**

35. In the absence of evidence to the contrary, a document that appears to be a notice issued under subsection 25(1) or 27(1) or (4) or given under section 28 or a certificate issued under subsection 37(1) is presumed to be authentic and is proof of its contents in any proceeding in respect of a violation or a prosecution for an offence.

**Recovery of Penalties and Amounts**

36. (1) A penalty imposed under this Act and an amount referred to in subsection 27(4) each constitute a debt due to Her Majesty in right of Canada and may be recovered in the Federal Court or any other court of competent jurisdiction.

(2) No proceedings to recover such a debt may be commenced later than seven years after the debt became payable.

(3) Each such debt is payable to the Receiver General.

37. (1) The Minister may issue a certificate certifying the unpaid amount of any debt referred to in subsection 36(1).

(2) Registration in the Federal Court or in any other court of competent jurisdiction of a certificate issued under subsection (1) has the same effect as a judgment of that Court for a debt of the amount specified in the certificate and all related registration costs.

**Offences**

38. (1) Every person who contravenes section 5 or subsection 16(1) or an order made under section 13 or 14 is guilty of an offence and liable on summary conviction

(a) in the case of an individual, to a fine not exceeding $50,000 or to imprisonment for a term not exceeding 18 months, or to both; and

(b) in any other case, to a fine not exceeding $250,000.

(2) Every person who contravenes subsection 18(5) or (6) or an order made under section 15 is guilty of an offence and liable on summary conviction

**Infractions**

38. (1) Quiconque contrevient à l’article 5 ou au paragraphe 16(1) ou à un ordre donné en vertu des articles 13 ou 14 commet une infraction passible, sur déclaration de culpabilité par procédure sommaire :

a) dans le cas d’une personne physique, d’une amende maximale de 50 000$ et d’un emprisonnement maximal de dix-huit mois, ou de l’une de ces peines;

b) dans tout autre cas, d’une amende maximale de 250 000$.

(2) Quiconque contrevient aux paragraphes 18(5) ou (6) ou à un ordre donné en vertu de l’article 15 commet une infraction passible, sur déclaration de culpabilité par procédure sommaire :

**Debts to Her Majesty**

36. (1) La pénalité et la somme visée au paragraphe 27(4) constituent des créances de Sa Majesté du chef du Canada, dont le recouvrement peut être poursuivi à ce titre devant la Cour fédérale ou tout autre tribunal compétent.

(2) Le recouvrement de la créance se prescrit par sept ans à compter de la date à laquelle elle est devenue exigible.

(3) Les sommes en cause sont versées au receveur général.

**Certificate**

37. (1) Le ministre peut établir un certificat de non-paiement pour la partie impayée de toute créance visée au paragraphe 36(1).

(2) L’enregistrement à la Cour fédérale ou à tout autre tribunal compétent confère au certificat valeur de jugement pour la somme visée et les frais afférents.

**Time limit**

36. (1) A penalty imposed under this Act and an amount referred to in subsection 27(4) each constitute a debt due to Her Majesty in right of Canada and may be recovered in the Federal Court or any other court of competent jurisdiction.

**Registration in Federal Court**

36. (1) La pénalité et la somme visée au paragraphe 27(4) constituent des créances de Sa Majesté du chef du Canada, dont le recouvrement peut être poursuivi à ce titre devant la Cour fédérale ou tout autre tribunal compétent.

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a) dans le cas d’une personne physique, d’une amende maximale de 50 000$ et d’un emprisonnement maximal de dix-huit mois, ou de l’une de ces peines;

b) dans tout autre cas, d’une amende maximale de 250 000$.

(2) Quiconque contrevient aux paragraphes 18(5) ou (6) ou à un ordre donné en vertu de l’article 15 commet une infraction passible, sur déclaration de culpabilité par procédure sommaire :
(a) in the case of an individual, to a fine not exceeding $25,000 or to imprisonment for a term not exceeding six months, or to both; and

(b) in any other case, to a fine not exceeding $125,000.

39. (1) If a person is alleged to have committed an act or omission that is a contravention of section 5 because of the application of section 6, proceedings in relation to that contravention may, whether or not the person is in Canada, be commenced in any territorial division in Canada, and the person may be tried and punished in respect of that offence in the same manner as if it had been committed in that territorial division.

(2) The provisions of the Criminal Code, including their exceptions, relating to requirements that an accused appear at and be present during proceedings apply in respect of proceedings commenced in a territorial division under subsection (1).

(3) If a person is alleged to have committed an act or omission referred to in subsection (1) and the person has been dealt with outside Canada for the contravention in a manner that, if the person had been dealt with in Canada for the contravention in that manner, would allow the person to plead autrefois acquit, autrefois convict or pardon, the person is deemed to have been so dealt with in Canada.

40. If a corporation commits an offence under this Act, any officer, director, agent or mandatary of the corporation who directed, authorized, assented to, acquiesced in or participated in the commission of the offence is a party to and guilty of the offence and is liable to the punishment provided for the offence, whether or not the corporation has been prosecuted or convicted.

41. In a prosecution for an offence under this Act, it is sufficient proof of the offence to establish that it was committed by an employee, an agent or a mandatary of the accused, whether or not the employee, agent or mandatary is identified or has been prosecuted for the offence.
Due diligence 42. (1) Due diligence is a defence in a prosecution for an offence under this Act.

Section 126 of Criminal Code 42. (1) La prise des précautions voulues peut être invoquée dans le cadre de toute poursuite pour infraction à la présente loi.

Continuing offence 43. No person shall be prosecuted under section 126 of the Criminal Code for a contravention of subsection 9(2).

Limitation period 43. Il est compté une infraction distincte pour chacun des jours au cours desquels se commet ou se continue l’infraction.

Injunctions 44. Any proceedings by way of summary conviction in respect of an offence under this Act may be instituted at any time within, but not later than, two years after the time when the subject-matter of the proceedings arose.

44. La poursuite de toute infraction punissable par procédure sommaire se prescrit par deux ans à compter de la perpétration.

45. If a court of competent jurisdiction — including the Federal Court — is satisfied, on application by the Minister, that a contravention of section 5 is being or is likely to be committed, the court may grant an injunction, subject to any conditions that the court considers appropriate, ordering any person to cease or refrain from any activity related to that contravention, or ordering the person to take any measure that a licensee could, under this Act, be required to take.

45. S’il est convaincu qu’il y a contravention ou risque de contravention à l’article 5, tout tribunal compétent peut, sur demande du ministre, accorder une injonction, assortie des conditions qu’il juge indiquées, ordonnant à quiconque de cesser toute activité liée à la contravention, de s’en abstenir ou de prendre toute mesure dont la prise peut être exigée du titulaire de licence au titre de la présente loi. La Cour fédérale est un tribunal compétent en l’espèce.

Review and report

45.1 (1) The Minister shall cause an independent review of the provisions and operation of this Act to be conducted from time to time in order to assess, in particular, its impact on technological development and on the implementation of international agreements and treaties.

45.1 (1) Le ministre fait procéder, à l’occasion, à un examen indépendant des dispositions et de l’application de la présente loi afin d’évaluer, notamment, sa pertinence quant au développement technologique et à la mise en vigueur d’ententes ou de traités internationaux.

(2) The Minister shall cause the report on a review conducted under subsection (1) to be laid before each House of Parliament within five years after the coming into force of this Act, and within every five-year period after the tabling of a report under this subsection.

46. [Amendments]

Disposition de coordination

46. [Modifications]
47. This Act, other than section 46, comes into force on a day to be fixed by order of the Governor in Council.

* [Note: Section 46 in force on assent November 25, 2005; Act, other than section 46, in force April 5, 2007, see SI 2007-47.]
Remote Sensing Space Systems Regulations

SOR/2007-66

Current to March 6, 2012

Last amended on April 5, 2007

Published by the Minister of Justice at the following address:
http://laws-lois.justice.gc.ca
Subsections 31(1) and (3) of the Legislation Revision and Consolidation Act, in force on June 1, 2009, provide as follows:

31. (1) Every copy of a consolidated statute or consolidated regulation published by the Minister under this Act in either print or electronic form is evidence of that statute or regulation and of its contents and every copy purporting to be published by the Minister is deemed to be so published, unless the contrary is shown.

31. (1) Tout exemplaire d'une loi codifiée ou d'un règlement codifié, publié par le ministre en vertu de la présente loi sur support papier ou sur support électronique, fait foi de cette loi ou de ce règlement et de son contenu. Tout exemplaire donné comme publié par le ministre est réputé avoir été ainsi publié, sauf preuve contraire.

(3) In the event of an inconsistency between a consolidated regulation published by the Minister under this Act and the original regulation or a subsequent amendment as registered by the Clerk of the Privy Council under the Statutory Instruments Act, the original regulation or amendment prevails to the extent of the inconsistency.

NOTE

This consolidation is current to March 6, 2012. The last amendments came into force on April 5, 2007. Any amendments that were not in force as of March 6, 2012 are set out at the end of this document under the heading “Amendments Not in Force”.

NOTE

Cette codification est à jour au 6 mars 2012. Les dernières modifications sont entrées en vigueur le 5 avril 2007. Toutes modifications qui n'étaient pas en vigueur au 6 mars 2012 sont énoncées à la fin de ce document sous le titre « Modifications non en vigueur ». 
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Her Excellency the Governor General in Council, on the recommendation of the Minister of Foreign Affairs, pursuant to section 20 of the Remote Sensing Space Systems Act, hereby makes the annexed Remote Sensing Space Systems Regulations.

* S.C. 2005, c. 45
REMOTE SENSING SPACE SYSTEMS
REGULATIONS

INTERPRETATION

1. (1) The following definitions apply in these Regulations.


“command protection plan” means a plan designed to protect the commands given to a remote sensing satellite of a remote sensing space system and the sales orders that give rise to those commands.

“contact information” means a person’s street and mail address, telephone and fax number and electronic mail address.

“data protection plan” means a plan designed to protect raw data and the remote sensing products produced from that data.

“entity” means a corporation, a partnership, a government, a government agency and an unincorporated organization.

“identifying information” means,
(a) in respect of an individual, their date and place of birth and citizenship;
(b) in respect of a corporation, its jurisdiction of incorporation or continuation; and
(c) in respect of a partnership or unincorporated entity, its jurisdiction of registration.

“sales order” means an order for raw data or a remote sensing product, including an internal order within a licensee or system participant for raw data or a remote sensing product.

Définitions et interprétation

1. (1) Les définitions qui suivent s’appliquent au présent règlement.

« commande client » Commande pour des données brutes ou des produits dérivés, y compris la commande interne provenant du titulaire de licence ou de l’un de ses participants autorisés.

« coordonnées » Les adresses postale, municipale et électronique ainsi que les numéros de téléphone et de télécopieur.

« entité » Personne morale, société de personnes, gouvernement, organisme gouvernemental ou organisation non dotée de la personnalité morale.

« Loi » La Loi sur les systèmes de télédétection spatiale.

« plan de protection des commandes » Plan visant à protéger les commandes données à un satellite de télédétection faisant partie du système de télédétection spatiale et les commandes clients à l’origine de ces commandes.

« plan de protection des données » Plan visant à protéger les données brutes et les produits dérivés obtenus par le traitement de ces données.

« renseignements identificatoires »

(a) Dans le cas d’une personne physique, ses date et lieu de naissance et sa citoyenneté;
(b) dans le cas d’une personne morale, son lieu d’incorporation en personne morale ou de prorogation;
(c) dans le cas d’une société de personnes ou d’une organisation non dotée
(2) An entity is controlled by a person if the person has control in fact, whether directly through the ownership of securities or indirectly through a trust, an agreement, an arrangement, the ownership of any body corporate or other means.

(2) Une entité est contrôlée par une personne si cette personne en a la maîtrise de fait, soit directe, par la propriété de valeurs mobilières, soit indirecte, notamment au moyen d’une fiducie, d’un accord, d’une entente ou de la propriété d’une personne morale.

(3) One entity is affiliated with another entity if one of them is controlled by the other or both are controlled by the same person.

(3) Sont du même groupe les entités dont l’une est contrôlée par l’autre ou les entités qui sont contrôlées par la même personne.

APPLICATIONS

2. (1) An application for the issuance of a licence must contain

(a) the information and documents set out in Schedule 1; and

(b) a declaration, signed and dated by the applicant or their authorized representative, that the information contained in the application is true, complete and correct.

(2) If the application includes an application to have a person designated as a system participant, the application must include a declaration signed and dated by the proposed system participant or its authorized representative attesting that

(a) the proposed system participant is authorized to enter into the agreement referred to in paragraph 32(c) of Schedule 1 by the laws of the jurisdiction in which it proposes to operate and, in the case of a corporation, the laws of the jurisdiction in which it is incorporated or continued; and

DEMANDES

2. (1) La demande de délivrance de licence contient :

a) les renseignements et documents mentionnés à l’annexe 1 ;

b) une déclaration signée et datée par le demandeur ou par son représentant autorisé attestant que les renseignements contenus dans la demande sont vrais, complets et exacts.

(2) Si elle contient une demande en vue d’obtenir la désignation d’un participant autorisé, elle est accompagnée d’une déclaration, signée et datée par l’intéressé ou par son représentant autorisé, attestant :

a) qu’il est habilité à conclure l’accord visé à l’alinéa 32c) de l’annexe 1 en vertu des règles de droit du lieu où il se propose d’exercer ses activités et, dans le cas d’une personne morale, des règles de droit du lieu où elle a été constituée ou prorogée;

b) que les renseignements à son égard contenus dans la demande sont vrais, complets et exacts.
(b) the information contained in the application relating to the proposed system participant is true, complete and correct.

### Amendment of licence

3. (1) An application for the amendment of a licence must include

(a) the applicant’s name and contact information;
(b) the amendment requested; and
(c) the requested effective date of the amendment.

(2) If the application includes a request to have a person designated as a system participant, the application must include

(a) the declaration described in subsection 2(2); and
(b) the information and agreement or proposed agreement referred to in section 32 of Schedule 1.

### System participant

### Renewal of licence

4. An application for the renewal of a licence must contain the applicant’s name and contact information and the requested term of the renewal.

### General requirements

5. (1) An application for the issuance, amendment or renewal of a licence must

(a) be in writing; and
(b) be accompanied by a copy of the application on electronic media.

(2) If any of the information or documents contained in an application for the issuance, amendment or renewal of a licence changes before the application is approved or refused, the applicant shall, without delay, inform the Minister of the change.

### Changes
6. If an application contains a copy of a proposed agreement referred to in paragraph 32(c) of Schedule 1, the licensee must provide the Minister with the final copy of the agreement as soon as it comes into effect.

7. If an application to issue a licence has not been approved or refused within 180 days after the applicant has provided the required information and documents, the Minister shall, as soon as feasible, notify the applicant of any issues to be resolved and any action required to resolve them. In the case of an application to amend or renew a licence, the period is 90 days after the applicant has provided the required information and documents.

PREScribed FACTORS

8. For the purposes of subsection 8(1) of the Act, the prescribed factors are the following:

(a) the ability of the applicant to comply with the Act and these Regulations; and

(b) the enhancement of the competitiveness, at the national and international levels, of the Canadian remote sensing space industry.

9. In addition to the factors prescribed in section 8, the following factors are prescribed in respect of an application for the renewal of a licence:

(a) any unpaid fee, fine, penalty or other amount due under the Act that is owing by the licensee;

(b) the danger to the environment, public health or the safety of persons and property arising from not disposing of

FACTEURS RÉGLEMENTAIRES

8. Pour l’application du paragraphe 8(1) de la Loi, les facteurs réglementaires sont les suivants:

a) la capacité du demandeur de satisfaire aux exigences de la Loi ou du présent règlement;

b) l’accroissement de la compétitivité, sur les plans national et international, de l’industrie canadienne de télédétection spatiale.

9. En plus des facteurs réglementaires prévus à l’article 8, les facteurs réglementaires ci-après s’appliquent aux demandes de renouvellement de licence:

a) l’existence de droits, d’amendes, de pénalités ou de toutes autres sommes exigibles du demandeur aux termes de la Loi, qui sont en souffrance;

b) le danger que présente, pour l’environnement, la santé publique ou la sécur-
the licensed system in accordance with the timing of the system disposal plan; and

(c) the data continuity for recipients of raw data or remote sensing products.

10. For the purposes of subsection 10(1) of the Act, the prescribed factors are the following:

(a) the failure of the licensee to comply with the Act, these Regulations or the conditions of the licence; and

(b) the failure of a system participant to comply with the provisions of the agreement referred to in paragraph 32(c) of Schedule 1.

11. For the purposes of section 12 of the Act, the prescribed factors are the following:

(a) the failure or inability of the licensee to comply with the Act, these Regulations or the conditions of the licence; and

(b) the failure of the licensee to pay any fee, fine, penalty or other amount due under the Act.

12. The following conditions are prescribed as conditions of a licence:

(a) the licensee must have a contact person for the purpose of communication with the Government of Canada who is an individual who meets the require-
ments of the appropriate level of security clearance — under the Government Security Policy, as amended from time to time, published by the Treasury Board Secretariat — for the nature of the commands given to and the raw data acquired by the remote sensing satellites of the licensed system;

(b) the licensee must, without delay, notify the Minister in writing of any change in control of the licensee or an affiliate of the licensee that is involved in the operation of the licensed system and provide the name, identifying information and contact information of each person who exercises control;

(c) the licensee must, without delay, notify the Minister in writing of any change in the name, identifying information or contact information of the licensee or any system participant;

(d) the licensee must on a regular basis evaluate the system disposal plan for the licensed system and, if amendments are needed, without delay, apply to the Minister for an amendment to the plan in accordance with paragraph 9(3)(a) of the Act;

(e) the licensee must evaluate its command protection plan and data protection plan on a regular basis and ensure that its system participants evaluate their data protection plans and, if any, their command protection plans and notify the Minister in writing, without delay, of any proposed changes to any of those plans; and

(f) the licensee must, without delay, notify the Minister in writing of its decision to discontinue operation of the licensed system, or of the financial exigencies de la cote de sécurité au niveau approprié selon la Politique sur la sécurité, avec ses modifications successives, publiée par le Secrétariat du Conseil du Trésor, compte tenu du type de commandes données au satellite de télédétection faisant partie du système agrégé et des données brutes obtenues au moyen de ce satellite;

b) le titulaire de licence notifie sans délai le ministre par écrit de tout changement de contrôle à son égard ou à l’égard d’une entité du même groupe que lui qui participe à l’exploitation du système agrégé et lui fournit les nom, renseignements identificatoires et coordonnées de toute personne exerçant le contrôle;

c) le titulaire de licence notifie sans délai le ministre par écrit de tout changement à l’égard des nom, renseignements identificatoires ou coordonnées du titulaire de licence ou d’un participant autorisé;

d) le titulaire de licence évalue régulièrement le plan de disposition du système agrégé et si des modifications s’avèrent requises, demande sans délai au ministre de le modifier conformément à l’alinéa 9(3)a) de la Loi;

e) le titulaire de licence évalue régulièrement son plan de protection des commandes et son plan de protection des données et veille à ce que chaque participant autorisé fasse de même à l’égard de son propre plan de protection des données et, le cas échéant, de son propre plan de protection des commandes. Il notifie sans délai le ministre par écrit de tout changement apporté à l’un ou l’autre de ces plans;
insolvency, dissolution or termination of operations of the licensee or one of its system participants.

TRANSFORMATION OF RAW DATA

13. (1) Any process that retains the phase information of raw data, or that produces an output from which measurements can be taken to determine the phase response of a remotely sensed surface, including the process to produce the synthetic aperture radar output known as Single Look Complex, is not considered to transform the raw data.

(2) Any process or series of processes operating on raw data that rectifies errors, distortions and other artifacts of the system by pixel aggregation, averaging or resampling are considered to transform the raw data if the process or series of processes also

(a) radiometrically calibrates the data; or
(b) geocodes the data with respect to features of the Earth by resampling.

PRIORITY ACCESS ORDERS

14. An amount paid by a minister under subsection 22(2) of the Act for a service must not exceed

(a) an amount that is in accordance with any agreement in effect between the minister and the licensee at the time the service was provided; or

f) le titulaire de licence notifie sans délai le ministre par écrit de sa décision de mettre fin à l’exploitation du système agréé ou encore de son insolvabilité, sa dissolution ou la cessation de ses opérations ou de celles de l’un de ses participants autorisés.

TRAITEMENT DE DONNÉES BRUTES

13. (1) N’est pas considérée comme étant un traitement de données brutes l’opération qui conserve l’information de phase de ces données, ou qui produit des données de sortie dont il est possible d’extraire des mesures qui permettent de déterminer la phase du signal de retour d’une surface télédéectée, non plus que l’opération du signal radar à synthèse d’ouverture qui produit des données de format singulier complexe.

(2) Les opérations et les séries d’opérations qui rectifient les erreurs, les distorsions et autres artefacts par agrégation de pixels, par moyenne ou par rééchantillonnage sont considérées comme étant des traitements de données brutes si ces opérations ou séries d’opérations :

(a) soit étalonnt radiométriquement les données;
(b) soit géocodent les données, en ce qui a trait aux éléments de la surface terrestre, par rééchantillonnage.

ORDRES D’ACCÈS PRIORITAIRE

14. La somme versée par un ministre pour la fourniture d’un service en vertu du paragraphe 22(2) de la Loi ne peut excéder :

(a) la somme établie conformément à tout accord entre le ministre et le titu-
(b) if there is no agreement, an amount that is proportionate to an amount received by the licensee for a comparable service provided on a priority basis to any person during the 12 months prior to the providing of the service.

NOTIFICATION

15. (1) A licensee must, as soon as feasible, notify the Minister in writing if the licensee has reasonable grounds to believe that

(a) the licensed system poses a danger to the environment, public health or the safety of persons or property;

(b) the licensee has lost or is in danger of losing control of a remote sensing satellite;

(c) the cryptography used in communications with the remote sensing satellite or the information assurance measures for the licensed system are malfunctioning;

(d) an unauthorized communication of raw data has occurred;

(e) the provision of a remote sensing product has been provided in breach of a condition imposed under subsection 8(7) of the Act; or

(f) there has been a breach in the security of the licensed system.

(2) Within 21 days after notifying the Minister, the licensee must provide a written report to the Minister that describes the situation, its probable cause and the corrective action taken.
A licensee must maintain the following records for a period of one year:

(a) a record of every sales order placed with it;

(b) a record of every command given to each remote sensing satellite of the remote sensing space system, including the date and time of the command;

(c) a record of all raw data received from each remote sensing satellite, including the date and time of receipt;

(d) a record of raw data being entered into the archives of the licensee and the disposal of raw data, including the date of each entry and disposal;

(e) a catalogue that lists the raw data that is accessible to the public, including the date of each entry into the catalogue;

(f) a record of every use of raw data by the licensee or of a system participant to make Single Look Complex data or a remote sensing product, including the date and time it was used;

(g) a record of every communication of raw data or provision of a remote sensing product to any person, including the date and time it was communicated or provided; and

(h) a record of any amount paid by a minister under subsection 22(2) of the Act for the provision of a service on a priority basis, including the date the service was provided.
The licensee must keep the records in a manner that enables the ready determination of the following in respect of every sales order:

(a) the date and time of the sales order;
(b) the name and contact information of the person who placed the sales order;
(c) the type of raw data or remote sensing product ordered;
(d) the location sensed in order to fill the sales order; and
(e) the name and contact information of the recipient of the raw data or remote sensing product and the conditions under which the recipient may make use of the data or product.

(2) Le titulaire de licence tient les registres de façon à permettre de vérifier facilement, à l’égard de toute commande client, les éléments suivants:

a) les date et heure de la commande client;
b) les nom et coordonnées de la personne qui a passé la commande client;
c) le type de données brutes ou de produits dérivés commandés;
d) la zone géographique visée par la commande client qui a fait l’objet de la télédétection spatiale;
e) les nom et coordonnées du destinataire des données brutes ou des produits dérivés et leurs conditions d’utilisation par le destinataire.

(3) The licensee must keep the records in a form that allows them to be readily examined and communicated.

(3) Le titulaire de licence tient les registres de façon à ce qu’ils soient facilement accessibles pour examen et communication.

(4) Every licensee who becomes aware of an inaccuracy or incompleteness in a record that has been examined by an inspector or communicated to the Minister must, without delay, notify the Minister in writing.

(4) Le titulaire de licence qui relève des renseignements inexacts ou incomplets dans un registre qui a été examiné par un inspecteur ou communiqué au ministre en notifye sans délai le ministre par écrit.

(5) Every licensee must ensure that every system participant maintains – for one year and in accordance with subsections (2) and (3) – the records identified in paragraphs (1)(a) to (g) that are in respect of the participant’s activities in the operation of the licensed system.

(5) Le titulaire de licence veille à ce que le participant autorisé tienne également, pour une période d’un an et conformément aux paragraphes (2) et (3), les registres prévus aux alinéas (1)(a) à g) à l’égard des activités que ce dernier exerce dans le cadre de l’exploitation du système agréé.
ARCHIVING AND ACCESS TO RAW DATA

17. (1) A licensee must archive raw data from the remote sensing satellite in a readily retrievable format for a minimum period of 15 months from

(a) the day on which an entry for the raw data was first made in a catalogue accessible to the public; or
(b) if the raw data was not entered in a catalogue accessible to the public, the day on which the raw data was received by a ground station.

(2) A licensee must, before disposing of the raw data, notify the Minister and provide the following information about each scene of raw data:

(a) a unique identifier;
(b) the date and time when the raw data was acquired by the remote sensing satellite;
(c) the geographic boundaries of the scene;
(d) the position of the satellite when the raw data was acquired;
(e) the sensor modes used to acquire the raw data;
(f) the ground station that received the raw data;
(g) the date and time when the ground station received the raw data;
(h) the date on or after which the raw data will be disposed of;
(i) the cost to communicate the raw data; and
(j) the name and contact information of a contact person.

ARCHIVAGE ET ACCÈS AUX DONNÉES BRUTES ARCHIVÉES

17. (1) Le titulaire de licence archive, dans un format facilement accessible, les données brutes obtenues au moyen du satellite de télédétection pour une période minimale de quinze mois à compter:

(a) de la date de la première entrée des données brutes dans un catalogue accessible au public;
(b) à défaut d’une telle entrée dans le catalogue, de la date d’obtention de ces données par une station terrestre.

(2) Avant de disposer des données brutes, le titulaire de licence donne au ministre un avis comprenant les renseignements ci-après à l’égard de chaque scène de données brutes:

(a) un identificateur unique;
(b) les date et heure d’obtention des données brutes au moyen du satellite;
(c) les limites géographiques de la scène;
(d) la position du satellite au moment de l’obtention des données brutes;
(e) les modes du capteur utilisés pour l’obtention des données brutes;
(f) l’identification de la station terrestre qui a reçu les données brutes;
(g) les date et heure de la réception des données brutes par la station terrestre;
(h) la date à laquelle ou à compter de laquelle il sera disposé des données brutes;
(i) les frais de communication des données brutes;
(j) les nom et coordonnées de la personne-ressource.
(3) The licensee may not send the notice until 12 months of the 15-month period referred to in subsection (1) have expired.

(4) The licensee may not dispose of the raw data until three months after the day on which the notice was sent.

18. On receipt of a notification under subsection 17(2), the Minister may, and the licensee must on the request of the Minister, inform any person to whom the licensee is authorized to communicate raw data under subsection 8(6) of the Act about the proposed disposal of the raw data.

19. (1) The Minister or a person to whom the licensee is authorized to communicate raw data under subsection 8(6) of the Act may, at any time before the raw data is disposed of, request the communication of the raw data from the contact person referred to in paragraph 17(2)(j), and the licensee must provide the raw data as soon as feasible.

(2) The Minister or the person that receives the raw data must pay the licensee an amount equal to the reasonable costs of communicating the data.

REPORTS

20. (1) A licensee must provide to the Minister reports of the preliminary design review and critical design review for the following elements of the licensed system:

(a) the remote sensing space system as a whole;

(b) each type of remote sensing sensor of each type of remote sensing satellite;

(3) Le titulaire de licence ne peut donner au ministre l’avis avant l’expiration des douze premiers mois de la période de quinze mois visée au paragraphe (1).

(4) Le titulaire de licence ne peut disposer des données brutes visées par l’avis avant l’expiration d’un délai de trois mois suivant l’envoi de cet avis.

18. Sur réception de l’avis prévu au paragraphe 17(2), le ministre peut — ou, sur demande du ministre, le titulaire de licence doit — informer toute personne à qui le titulaire de licence est autorisé à communiquer des données brutes aux termes du paragraphe 8(6) de la Loi de la disposition prévue de celles-ci.

19. (1) Le ministre, ou toute personne à qui le titulaire de licence est autorisé à communiquer des données brutes aux termes du paragraphe 8(6) de la Loi, peut — tant qu’il n’en a pas été disposé — demander à la personne-ressource visée à l’alinéa 17(2)j), de lui communiquer ces données. Le titulaire de licence les fournit dans les meilleurs délais.

(2) Le ministre ou toute autre personne qui reçoit la communication des données brutes verse au titulaire de licence une somme équivalente au coût raisonnable de communication des données.
(c) each type of satellite platform of each type of remote sensing satellite;
(d) each class of telemetry, tracking and control station of the system, including its command generation and information assurance subsystems; and
(e) each class of ground station of the system, including its reception, storage, processing, delivery and information assurance subsystems.

(2) Each report must contain a copy in written or electronic format of all information, documents and records prepared by or for the licensee for the review.

(3) The licensee must provide each report within 45 days after the completion of each review.

21. A licensee must, as soon as feasible, provide a written report to the Minister
(a) of the entry into effect of a contract for the launch of the first remote sensing satellite of the licensed system; and
(b) of the licensee’s taking delivery of the flight sensors of the first remote sensing satellite of the licensed system.

22. (1) A licensee must, at least 45 days prior to the planned launch of a remote sensing satellite, provide a written report to the Minister that contains

(2) Chaque rapport comprend une copie, sur support papier ou électronique, de tout renseignement, document ou registre établi par le titulaire de licence ou pour lui aux fins de la revue en cause.

(3) Le titulaire de licence fournit au ministre le rapport dans les quarante-cinq jours suivant l’achèvement de la revue en cause.

21. Le titulaire de licence fournit au ministre, dans les meilleurs délais, un rapport écrit confirmant les éléments suivants :
(a) l’entrée en vigueur du contrat relatif au lancement du premier satellite de télédétection du système agréé ;
(b) sa réception de la livraison des capteurs de vol du premier satellite de télédétection du système agréé.

22. (1) Le titulaire de licence fournit au ministre, dans les quarante-cinq jours précédant la date prévue de lancement d’un satellite de télédétection, un rapport écrit qui contient les renseignements suivants :
(a) the start date and time, expressed in Coordinated Universal Time, of the planned launch window and its duration expressed in days;

(b) the name and location of the launch site expressed as a latitude and longitude;

(c) the azimuth of the proposed launch trajectory expressed in degrees measured positive clockwise from True North in a local frame of reference centred on the launch site;

(d) the type of the launch vehicle; and

(e) the geographic boundaries of the area that could be subject to falling debris from a normal launch and from a launch failure.

(2) The licensee shall, without delay, inform the Minister of any change in any of the information provided under subsection (1).

23. (1) A licensee must, within 21 days after a remote sensing satellite becomes operational, provide a written report to the Minister that contains

(a) the date of the launch and the name and location of the launch site expressed as a latitude and longitude;

(b) the basic orbital parameters of the satellite, including nodal period, inclination, apogee and perigee; and

(c) any difference between the satellite performance specifications set out in the conditions of the licence and the actual performance of the satellite.

(2) If a remote sensing satellite fails to become operational or becomes inoperable, the licensee must, within 21 days after de-
termining that fact, provide a written report to the Minister that contains the information described in subsection (1) as is appropriate in the circumstances.

REPRESENTATIONS AND NOTICE

24. (1) A representation made to a minister or an enforcement officer under the Act must be in writing.

(2) A notice given by a minister under the Act must be in writing.

OBSERVATIONS ET AVIS

24. (1) Les observations présentées à un ministre ou à un agent verbalisateur en vertu de la Loi doivent l’être par écrit.

(2) Tout avis donné par un ministre en vertu de la Loi est donné par écrit.

VIOLATIONS

25. (1) For the purpose of carrying out section 23 of the Act, the following are designated as the provisions and conditions whose contravention may be proceeded with as a violation:

(a) the provisions of the Act set out in column 1 of Part 1 of Schedule 2;

(b) the provisions of these Regulations set out in column 1 of Part 2 of Schedule 2;

(c) the provisions of orders made under subsections 13(1), 14(1) and (2) and 15(1) to (3) of the Act;

(d) the conditions of a licence set out in column 1 of Part 3 of Schedule 2 imposed by the Act or these Regulations; and

(e) the conditions of a licence imposed under subsections 8(5) to (7) of the Act.

25. (1) Pour l’application de l’article 23 de la Loi, les dispositions et les conditions ci-après sont désignées comme textes dont la contravention constitue une violation:

a) les dispositions de la Loi mentionnées à la colonne 1 de la partie 1 de l’annexe 2;

b) les dispositions du présent règlement mentionnées à la colonne 1 de la partie 2 de l’annexe 2;

c) les obligations imposées par les paragraphes 13(1), 14(1) et (2) et 15(1) à (3) de la Loi;

d) les conditions de la licence mentionnées à la colonne 1 de la partie 3 de l’annexe 2, lesquelles sont prévues par la Loi ou le présent règlement;

e) les conditions de la licence précisées par le ministre en vertu des paragraphes 8(5) à (7) de la Loi.

(2) The maximum administrative monetary penalty for a violation of a designated provision or condition set out in column 1 of Parts 1 to 3 of Schedule 2 is

(2) Le montant maximal de la pénalité applicable à chaque violation d’un texte désigné mentionné à la colonne 1 des parties 1 à 3 de l’annexe 2 est:
(a) in the case of individuals, the amount set out in column 2; and

(b) in any other case, the amount set out in column 3.

(3) The maximum administrative monetary penalty for a violation of a designated provision referred to in paragraph (1)(c) or a designated condition referred to in paragraph (1)(e) is

(a) in the case of individuals, $5,000; and

(b) in any other case, $25,000.

26. In determining a proposed penalty, an enforcement officer must take into account any notification given by the licensee under subsection 15(1) or 16(4).

COMING INTO FORCE

27. These Regulations come into force on the day on which section 20 of the Remote Sensing Space Systems Act, chapter 45 of the Statutes of Canada, 2005, comes into force.

* [Note: Regulations in force April 5, 2007, see S/ 2007-47]
SCHEDULE 1
(Paragraphs 2(1)(a) and (2)(a) and 3(2)(b), section 6 and paragraph 10(b))

INFORMATION AND DOCUMENTS TO SUPPORT AN
APPLICATION

BUSINESS INFORMATION AND DOCUMENTS

1. The applicant’s name, identifying information and contact information.

2. The name, identifying information and contact information of the individual proposed to be the contact person for the applicant.

3. The following completed forms for the individual proposed to be the applicant’s contact person:
   (a) Personnel Screening, Consent and Authorization Form (TBS/SCT 330-23) of the Treasury Board Secretariat, as amended from time to time;
   (b) Security Screening Certificate and Briefing Form (TBS/SCT 330-47) of the Treasury Board Secretariat, as amended from time to time;
   (c) Security Clearance Form (TBS/SCT 330-60) of the Treasury Board Secretariat, as amended from time to time; and
   (d) Royal Canadian Mounted Police fingerprint form C216-C, as amended from time to time.

4. If the applicant is an entity, other than a government or government agency,
   (a) a certified copy of its instrument of incorporation or continuance or its business registration in its jurisdiction of operation, as the case may be;
   (b) the name, identifying information and contact information of the chief executive officer and each of the applicant’s directors, if any;
   (c) the name, identifying information and contact information of each of the applicant’s officers who will be responsible for the operation of the remote sensing space system;
   (d) the name, identifying information and contact information of each owner of an interest equal to or greater than 10% in the applicant, and the interest held by that owner; and
   (e) the name, identifying information and contact information of each person who exercises control over the applicant.

5. The name, identifying information and contact information of each of the applicant’s secured creditors.

6. The name, identifying information, contact information and amount of indebtedness for every person to whom the applicant is indebted for more than 5% of the applicant’s total indebtedness.

7. The applicant’s plans for communicating raw data or providing remote sensing products, including

ANNEXE 1
(alinéas 2(1)(a) et (2)(a) et 3(2)(b), article 6 et alinéa 10b))

RENSEIGNEMENTS ET DOCUMENTS À L’APPUI DE LA DEMANDE

RENSEIGNEMENTS ET DOCUMENTS ADMINISTRATIFS

1. Les nom, renseignements identificatoires et coordonnées du demandeur.

2. Les nom, renseignements identificatoires et coordonnées de la personne physique proposée à titre de personne-ressource du demandeur.

3. Les formulaires ci-après remplis à l’égard de la personne physique proposée à titre de personne-ressource du demandeur :
   a) le formulaire SCT/TBS 330-23 du Secrétariat du Conseil du Trésor, intitulé Formulaire de vérification de sécurité, de consentement et d’autorisation du personnel, avec ses modifications successives;
   b) le formulaire SCT/TBS 330-47 du Secrétariat du Conseil du Trésor, intitulé Certificat d’enquête de sécurité et profil de sécurité, avec ses modifications successives;
   c) le formulaire SCT/TBS 330-60 du Secrétariat du Conseil du Trésor, intitulé Formulaire d’autorisation de sécurité, avec ses modifications successives;
   d) le formulaire pour les empreintes digitales C216-C de la Gendarmerie royale du Canada, avec ses modifications successives.

4. Dans le cas où le demandeur est une entité, autre qu’un gouvernement ou un organisme gouvernemental :
   a) une copie certifiée de l’acte constitutif ou de prorogation de l’entité ou de son inscription au registre des entreprises de son lieu d’exploitation, selon le cas;
   b) les nom, renseignements identificatoires et coordonnées du directeur général et de chacun de ses administrateurs, le cas échéant;
   c) les nom, renseignements identificatoires et coordonnées de chacun de ses dirigeants qui sera responsable de l’exploitation du système de télédétection spatiale;
   d) les nom, renseignements identificatoires et coordonnées de chacun de ses propriétaires qui détient un intérêt égal ou supérieur à 10 % et l’intérêt de ce propriétaire;
   e) les nom, renseignements identificatoires et coordonnées de toute personne qui la contrôle.

5. Les nom, renseignements identificatoires et coordonnées de chaque créancier garanti.

6. Pour tout emprunt du demandeur dont le solde excède 5 % de l’endettement total de celui-ci, les nom, renseignements identificatoires et coordonnées du prêteur et le solde du prêt.

7. Les plans du demandeur pour la communication de données brutes et la fourniture de produits dérivés, y compris:
8. The address where the applicant’s records will be maintained.

GENERAL SYSTEM INFORMATION

9. The name and a short description of the remote sensing space system, including the number of remote sensing satellites of the system, the planned date that each satellite will become operational and the anticipated mission life of each satellite.

10. The proposed launch date, vehicle and site.

ORBIT INFORMATION

11. The nominal orbit and tolerances of each remote sensing satellite of the remote sensing space system, including

(a) the semi-major axis, eccentricity, inclination, longitude of right ascension, argument of periapsis, argument of mean anomaly and epoch;
(b) the period, repeat cycle and any subcycle; and
(c) the equator crossing time of the ascending node of any sun-synchronous orbit.

REMOTE SENSING SATELLITE DISPOSAL

12. The potential hazard from space debris and the strategy to mitigate that hazard for each remote sensing satellite of the remote sensing space system, including

(a) the method of disposal that is proposed for each satellite and the reliability of that method;
(b) the estimated duration of the satellite disposal operation;
(c) the probability of loss of human life and how it was calculated;
(d) the amount of debris expected to reach the surface of the Earth, the size of the impact area expressed in square metres, and how they were calculated;
(e) the geographic boundaries of the likely debris re-entry impact area, the confidence level of the determination of the boundaries and how the boundaries and confidence level were calculated;
(f) the identity and quantity of hazardous material and dangerous goods contained in each satellite at the end of its mission life, the quantity expected to reach the surface of the Earth on re-entry and how the quantities were calculated;
(g) the orbital elements and epochs of the proposed disposal orbits for each satellite; and
(h) an assessment of space debris expected to be released from each satellite during normal operations by explosions, by intentional break-ups and by on-orbit collisions, and the measures proposed to mitigate the production of space debris.

a) la façon de mettre ces données et ces produits à la disposition des gouvernements dont les territoires ont été observés par le système de télédétection spatiale;
b) la façon de fournir tout accès privilégié ou exclusif à ces données ou produits.

8. L’adresse des locaux où le demandeur conservera ses registres.

RENSEIGNEMENTS GÉNÉRAUX SUR LE SYSTÈME DE TÉLÉDÉTECTION SPATIALE

9. Le nom et une courte description du système de télédétection spatiale, y compris le nombre de satellites de télédétection faisant partie du système, la date prévue de mise en service de chaque satellite et la durée de la mission prévue pour chacun d’entre eux.

10. La date prévue de lancement ainsi que les site et véhicule de lancement proposés.

RENSEIGNEMENTS SUR L’ORBITE NOMINALE

11. L’orbite nominale et les tolérances de chaque satellite de télédétection faisant partie du système de télédétection spatiale, y compris les renseignements suivants:

(a) le demi-grand axe, l’excentricité, l’inclinaison, la longitude de l’ascension droite, l’argument du périastre, l’argument de l’anomalie moyenne et l’époque;
(b) la période de révolution et le cycle de répétition de passage et, le cas échéant, le sous-cycle;
(c) si l’orbite nominale est héliosynchrone, le temps de passage à l’équateur du nœud ascendant de l’orbite.

DISPOSITION DES SATELLITES DE TÉLÉDÉTECTION

12. Pour chaque satellite de télédétection faisant partie du système de télédétection spatiale, les risques de débris spatiaux et la stratégie pour les mitiger, laquelle prévoit notamment:

(a) la méthode de disposition proposée pour chaque satellite et sa fiabilité;
(b) la durée prévue des opérations de disposition du satellite;
(c) la probabilité de pertes de vies humaines et la méthode de son calcul;
(d) la masse de débris prévue retomber sur la Terre, l’étendue de la zone touchée par l’impact en mètres carrés et la méthode de leur calcul;
(e) les limites géographiques de la zone d’impact prévue de la retombée des débris, le degré de certitude de l’établissement de ces limites et la méthode de leur calcul;
(f) l’identification et la quantité des matières et des marchandises dangereuses contenues dans chaque satellite à la fin de sa mission, la quantité qui est prévue retomber sur la Terre au moment de la rentrée du satellite et la méthode de leur calcul;
(g) les éléments orbitaux et les époques des orbites d’évacuation proposées pour chaque satellite;
(h) pour chaque satellite, une évaluation des débris spatiaux dont le relâchement est prévu lors d’opérations normales, par explosion,
REMOTE SENSING SATELLITE INFORMATION AND DOCUMENTS

13. A technical description of each remote sensing satellite of the remote sensing space system, including

(a) a drawing of the satellite in its on-orbit configuration;
(b) its command and data handling subsystem capabilities, including its data storage technology and capacity, data transfer rate, method of access to stored data and directionality of its command, telemetry and downlink antennas;
(c) its navigation, guidance and control capabilities, including the accuracy of position, velocity, acceleration and time, and the type of technology used for those capabilities;
(d) its attitude control subsystem capabilities, including the jerk and jitter, and the type of technology used for those capabilities;
(e) its propulsion subsystem capabilities, including the amount of propellant allocated for the disposal of the satellite;
(f) its sensor technology for each sensor, including
   (i) the sensor modes,
   (ii) the spatial resolution capability of each sensor mode, and how it was calculated,
   (iii) the centre frequency or wavelength, bandwidth and sweep, if any, of the transmitted and received spectral bands used in each sensor mode indicating which sensor modes are co-registered by common sensor elements and which sensor modes are independent,
   (iv) the polarization of transmitted and received signals with respect to each sensor mode,
   (v) the fields of view or beam widths for each sensor mode,
   (vi) for each sensor mode, the range of viewing angles or angles of incidence, and their increments of change,
   (vii) for each sensor mode, the slew and squint angles and their rates of change, and a description of the scan mechanisms employed,
   (viii) the ground distance from nadir and the instantaneous swath width and potential swath width for each sensor mode,
   (ix) the image motion compensation parameters, including those for linear motion and drift,
   (x) if applicable, the characteristics of the time-delayed integration mode used within the sensor focal plane,
   (xi) spatial, spectral and temporal oversampling, aggregation and resampling capabilities,
   (xii) sensitivity, including noise-equivalent-spectral-radiance for electro-optic sensors, noise-equivalent-sigmas for synthetic aperture radar sensors and noise-equivalent-temperature-differences for thermal infrared sensors,
   (xiii) for each sensor mode, the signal-to-noise ratio, dynamic range and quantization,

par démolition intentionnelle ou par collision en orbite, et les mesures proposées pour limiter la production de débris spatiaux.

RENSEIGNEMENTS ET DOCUMENTS SUR LE SATELLITE DE TÉLÉDÉTECTION

13. La description technique de chaque satellite de télédétection faisant partie du système de télédétection spatiale, y compris :

(a) un dessin du satellite dans sa configuration orbitale;
(b) le sous-système de commande et de maniement des données, y compris la technologie et la capacité de stockage utilisées, la vitesse de transfert des données, la méthode d’accès aux données et la directivité des antennes de commande, de télémétrie et de liaison descendinge;
(c) les capacités de navigation, de guidage et de contrôle, y compris l’exactitude de position, de vitesse, d’accélération et de temps, et la technologie utilisée pour ces capacités;
(d) les capacités du sous-système de contrôle d’attitude, y compris la suraccélération et la gigue, et la technologie à laquelle ces capacités font appel;
(e) les capacités du sous-système de propulsion, y compris la charge de propérol prévue pour la disposition du satellite;
(f) la technologie de chaque capteur, y compris les renseignements suivants :

   (i) les modes du capteur,
   (ii) la capacité de résolution spatiale de chaque mode du capteur et la méthode de son calcul,
   (iii) la fréquence ou longueur d’onde centrale, la largeur de bande et le balayage, le cas échéant, de chaque bande spectrale reçue et transmise, qui sont utilisés pour chaque mode du capteur et une spécification des modes qui sont mis en correspondance par un élément de capteur commun et de ceux qui sont indépendants,
   (iv) la polarisation des signaux émis et reçus à l’égard de chaque mode du capteur,
   (v) les champs de visée ou les largeurs de faisceau de chaque mode du capteur,
   (vi) pour chaque mode du capteur, l’étendue des angles de visée ou des angles d’incidence et leurs échelons d’augmentation,
   (vii) pour chaque mode du capteur, les angles de pivotement et de strabisme et leur vitesse de changement ainsi qu’une description des mécanismes de balayage utilisés,
   (viii) la distance au sol du nadir et la largeur de fauchée instantanée et potentielle de chaque mode du capteur,
   (ix) les paramètres compensateurs du déplacement de l’image, y compris ceux de mouvement linéaire et de déplacement latéral,
   (x) le cas échéant, les caractéristiques du mode d’intégration décalée utilisé dans le plan focal du capteur,
   (xi) les capacités de suréchantillonnage, d’agrégation ou de rééchantillonnage spatiales, spectrales et temporelles,
   (xii) la sensibilité, y compris le rayonnement spectral équivalent de bruit des capteurs électro-optiques, les équivalents de bruit
(xiv) if applicable, the range of solar illumination angles on the surface of the Earth over which the sensor can operate,
(xv) the absolute and relative geolocation accuracy of the raw data and remote sensing products and how they were calculated, and
(xvi) calibration methods, including absolute calibration accuracy; and
(g) the minimum time in hours between the acquisition of raw data by the satellite and the communication of the data or the provision of remote sensing products to a recipient.

**COMMAND PROTECTION PLAN**

14. The general strategy with respect to command protection.

15. The location and function of all facilities, including mobile facilities, to be used to process sales orders or to give commands in the operation of the remote sensing space system.

16. A general description and block diagram of all facilities to be used to process sales orders or to give commands, including the longitude and latitude and station mask of each telemetry, tracking and command station.

17. (1) A general description and block diagram of the communication architecture that includes descriptions of:

(a) each system supporting the facilities that are to be used to process sales orders or to give commands to the remote sensing satellite;
(b) links between the facilities and the satellite;
(c) links for relaying sales orders or satellite commands between facilities on the ground; and
(d) crosslinks between satellites.

(2) The radio-frequency link information for command uplinks, including the characterization of each link and the type of information carried by each communication channel.

(3) The protocols to be used in the communication architecture.

(4) A description of the encryption to be used on all communication channels, including keying and rekeying schemes.

(5) Management plans for the keys to be used in satellite uplinks, in command relays and in facilities for command generation and the processing of sales orders.

SIGMA des capteurs de radar de synthèse d’ouverture et les équivalents de bruit des différences thermales des capteurs infrarouges thermiques,
(xiii) pour chaque mode du capteur, le rapport signal sur bruit, la gamme dynamique du système et la quantification,
(xiv) le cas échéant, l’étendue des angles d’éclairement solaire sous lesquels une portion de la surface terrestre peut être observée par le capteur,
(xv) les précisions absolues et relatives de géolocalisation des données brutes et des produits dérivés et la méthode de leur calcul,
(xvi) les méthodes d’étalonnage, y compris la précision de l’étalonnage absolu;
g) le laps de temps minimal, en heures, entre l’obtention des données brutes par le satellite et la communication des données brutes ou la fourniture des produits dérivés à un destinataire.

**PLAN DE PROTECTION DES COMMANDES**

14. La stratégie générale à l’égard de la protection des commandes.

15. L’emplacement et la fonction de toutes les installations, y compris les installations mobiles, qui doivent être utilisées pour traiter des commandes clients ou pour donner des commandes dans le cadre de l’exploitation du système de télédétection spatiale.

16. Une description générale et un schéma fonctionnel des installations qui doivent être utilisées pour traiter des commandes clients ou pour donner des commandes, y compris la longitude, la latitude et les aires de visibilité de chaque station de télémétrie, de repérage et de commande.

17. (1) Une description générale et un schéma fonctionnel de l’architecture de communication, y compris une description des éléments suivants :

a) chaque système de soutien des installations qui doivent être utilisées pour traiter les commandes clients ou pour donner des commandes au satellite de télédétection;
b) les liaisons entre les installations et le satellite de télédétection;
c) les liaisons de relais entre les installations terrestres pour traiter les commandes clients ou pour donner des commandes au satellite de télédétection;
d) les liaisons croisées entre les satellites.

(2) L’information des liaisons en radiofréquence de commandes montantes, y compris la caractérisation de chaque liaison et le genre d’information transmise par chaque voie de communication.

(3) Les protocoles utilisés dans l’architecture de communication.

(4) Une description de l’encryptage qui doit être utilisé dans chaque voie de communication, y compris les plans de mise et de remise à clé.

(5) Les plans de gestion des clés qui doivent être utilisées dans les liaisons montantes, les relais de commandes ainsi que dans les installations de génération de commandes et celles où sont traitées les commandes clients.
18. A general description of
(a) the content and format of the proposed sales orders and the commands to be given in the operation of the remote sensing space system; and
(b) the process used to determine the commands given to the remote sensing satellite that sets out the priority of conflicting sales orders requiring the same resources of the satellite.

19. A diagram that
(a) shows each step to be taken by the applicant or proposed system participant from the placement of a sales order for raw data or a remote sensing product to the communication of the raw data to a recipient or the provision of the remote sensing product to a recipient; and
(b) indicates the command protection measures proposed for each step.

20. A description of the command protection measures proposed for each step of the business process, including
(a) the measures proposed for each facility to be used to process sales orders or to give commands to the remote sensing satellite, including measures relating to
   (i) the security screening of personnel,
   (ii) the physical security of the facility, and
   (iii) the information assurance, within the facility, of sales orders and satellite commands;
(b) the measures proposed for the communication of sales orders and satellite commands between the facilities of the remote sensing space system, including measures relating to physical and electronic protection and information assurance; and
(c) the measures proposed for the communication of commands to remote sensing satellites, including measures relating to electronic protection and information assurance.

21. Proposed measures to comply with
(a) the conditions in paragraphs 8(4)(a) to (f) of the Act;
(b) an order that may be made under section 14 or 15 of the Act; and
(c) section 16 of the Act.

DATA PROTECTION PLAN

22. The general strategy with respect to data protection.

23. The location and function of all facilities, including mobile facilities, to be used to handle raw data and remote sensing products in the operation of the remote sensing space system.

24. A general description and block diagram of all facilities to be used to handle raw data and remote sensing products, including the longitude and latitude and station mask of each ground station.
25. (1) A general description and block diagram of the proposed communication architecture that includes descriptions of
(a) each system supporting the facilities that are to be used to handle raw data and remote sensing products;
(b) links between the facilities and the remote sensing satellite;
(c) links for the relaying of raw data and remote sensing products between facilities on the ground; and
(d) crosslinks between remote sensing satellites.

(2) The radio-frequency downlink information, including the characterization of each link and the type of information carried by each communication channel.

(3) The protocols to be used in the communication architecture.

(4) A description of the encryption to be used on all communication channels including keying and rekeying schemes.

(5) Management plans for the keys to be used in satellite downlinks and relays and in facilities used to handle raw data and remote sensing products.

26. A general description of
(a) the content and format of raw data and remote sensing products; and
(b) the processes to be employed to alter image quality and information content at each step from the acquisition of raw data to the provision of a remote sensing product, including such processes as spatial or spectral pixel aggregation — discarding low order analog-to-digital bits — and data compression.

27. A diagram that
(a) shows each step to be taken by the applicant or proposed system participant from the placement of a sales order for raw data or a remote sensing product to the communication of raw data to a recipient or the provision of the remote sensing product to a recipient; and
(b) indicates the data protection measures proposed for each step.

28. A description of the data protection measures proposed for each step of the business process, including
(a) the measures proposed for each facility to be used to handle raw data and remote sensing products, including measures relating to
(i) the security screening of personnel,
(ii) the physical security of the facility, and
(iii) the information assurance, within the facility, in respect of raw data and remote sensing products;

brutes et des produits dérivés, y compris la longitude, la latitude et les aires de visibilité de chaque station terrestre.

25. (1) Une description générale et un schéma fonctionnel de l’architecture de communication proposée, y compris une description des éléments suivants :
(a) chaque système de soutien des installations qui doivent être utilisées pour le maniement des données brutes et des produits dérivés;
(b) les liaisons entre les installations et le satellite de télédétection;
(c) les liaisons de relais pour les données brutes et les produits dérivés entre les installations terrestres;
(d) les liaisons croisées entre les satellites de télédétection.

(2) L’information des liaisons en radiofréquence descendantes, y compris la caractèreisation de chaque liaison et le genre d’information transmise par chaque voie de communication.

(3) Les protocoles qui doivent être utilisés dans l’architecture de communication.

(4) Une description de l’encryptage qui doit être utilisé dans toute voie de communication, y compris les plans de mise et de remise à clé.

(5) Les plans de gestion des clés qui doivent être utilisées dans les liaisons descendantes et le relais terrestre du satellite de télédétection ainsi que dans les installations utilisées pour le maniement des données brutes et des produits dérivés.

26. Une description générale :
(a) du contenu et du format des données brutes et des produits dérivés;
(b) des opérations qui doivent être employées pour modifier la qualité de l’image et le contenu de l’information à chaque étape, depuis l’obtention des données brutes jusqu’à la fournitue de produits dérivés, y compris les opérations d’agrégeation de pixels spatiaux et spectaux — afin d’éliminer les bits de poids faible lors de la transformation de l’analogue à numérique — et de compression de données.

27. Un diagramme :
(a) illustrant chaque étape que doit exécuter le demandeur ou le participant autorisé proposé, depuis la passation d’une commande client pour des données brutes ou des produits dérivés jusqu’à leur communication ou leur fourniture, selon le cas, au destinataire;
(b) indiquant les mesures de protection des données proposées à chaque étape des opérations.

28. Une description des mesures de protection des données proposées à chaque étape du processus opérationnel, y compris :
(a) celles proposées à l’égard de chaque installation qui doit être utilisée pour le maniement des données brutes et des produits dérivés, notamment celles relatives :
(i) à la vérification de sécurité du personnel,
(ii) à la sécurité physique des lieux,
(iii) à l’assurance de l’information, à l’intérieur de l’installation, à l’égard des données brutes et des produits dérivés;
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(b) the measures proposed for the transfer of raw data and remote sensing products between the facilities of the remote sensing space system, including measures relating to physical and electronic protection and information assurance; and

(c) the measures proposed for the communication of raw data and the provision of remote sensing products to recipients, including measures relating to physical and electronic protection and information assurance.

29. Proposed measures to comply with any conditions of the licence that restrict the communication of raw data or the provision of remote sensing products related to

(a) recipients or classes of recipients of raw data or remote sensing products;
(b) sensor modes;
(c) types of raw data or remote sensing products;
(d) the time between the acquisition of raw data by the remote sensing satellite and the communication of the raw data or the provision of a remote sensing product to a recipient;
(e) the sensed territory;
(f) the location of the recipients; and
(g) any agreements entered into under paragraph 8(6)(b) or (7)(b) of the Act.

**Command and Data Protection Plan**

30. In lieu of a separate command protection plan and data protection plan, a combined command and data protection plan that contains the information and documents set out in sections 14 to 29 of this Schedule.

**Affiliated Entities**

31. The name, identifying information and contact information of each entity affiliated with the applicant that will be involved in the operation of the licensed system, a description of their involvement and the name, identifying information and contact information of each person who exercises control over the affiliated entity.

**System Participant Information**

32. If the application includes a request to designate a person to be a system participant,

(a) the proposed system participant’s name, identifying information and contact information;
(b) the address of each facility to be used by the proposed system participant for carrying on controlled activities, including the location and station mask of each ground station and telemetry, tracking and command station; and
(c) a copy of an agreement or proposed agreement between the applicant and the proposed system participant that specifies

(i) the territory from which the proposed system participant will communicate raw data and provide remote sensing products or will give commands to the remote sensing satellite,

(b) celles proposées à l’égard du transfert des données brutes et des produits dérivés entre les installations du système de télédétection spatiale, notamment celles relatives à la sécurité physique et électronique et à l’assurance de l’information;

(c) celles proposées à l’égard de la communication des données brutes et de la fourniture des produits dérivés aux destinataires, notamment celles relatives à la sécurité physique et électronique et à l’assurance de l’information.

29. Les mesures proposées pour se conformer aux conditions de la licence restreignant la communication des données brutes ou la fourniture des produits dérivés relativement aux éléments suivants :

(a) les destinataires des données brutes ou des produits dérivés ou catégories de tels destinataires;
(b) les modes du capteur;
(c) les types de données brutes ou de produits dérivés;
(d) le laps de temps entre l’obtention des données brutes par le satellite de télédétection et leur communication ou la fourniture de produits dérivés à un destinataire;
(e) le territoire qui fera l’objet de la télédétection spatiale;
(f) l’emplacement des destinataires;
(g) tout accord visé aux alinéas 8(6)b ou (7)b de la Loi.

**Plan de protection des commandes et des données**

30. Au lieu de fournir un plan de protection des commandes ainsi qu’un plan de protection des données, un seul plan de protection des commandes et des données comprenant les renseignements et les documents prévus aux articles 14 à 29 de la présente annexe.

**Entités du même groupe**

31. Les nom, renseignements identificatoires et coordonnées de chaque entité du même groupe que le demandeur qui participera à l’exploitation du système de télédétection spatiale et la description de sa participation, ainsi que les noms, renseignements identificatoires et coordonnées de chaque personne qui la contrôle.

**Renseignements sur le participant autorisé**

32. Si la demande contient une demande en vue d’obtenir la désignation d’un participant autorisé :

(a) les nom, renseignements identificatoires et coordonnées de ce dernier;

(b) l’adresse de chaque installation qu’il utilisera pour mener les activités contrôlées, y compris l’emplacement et les aires de visibilité de chaque station terrestre et de chaque station de télémesure, de repérage ou de commande;

(c) une copie de l’accord ou du projet d’accord entre lui et le demandeur prévoyant :

(i) le territoire visé pour la communication des données brutes et la fourniture des produits dérivés par lui et celui à partir duquel il pourra donner des commandes au satellite de télédétection,
(ii) the proposed system participant’s data protection plan that contains the information and documents referred to in sections 22 to 29 of this Schedule as modified to relate to the proposed system participant’s operations, and, if the applicant intends to permit the proposed system participant to formulate or give a command to a remote sensing satellite of the system, its command protection plan that contains the information and documents referred to in sections 14 to 21 of this Schedule as modified to relate to the proposed system participant’s operations,

(iii) how the proposed system participant will make raw data and remote sensing products available to the governments of countries whose territories have been sensed by the system,

(iv) how the proposed system participant will make raw data available to the applicant before the data is disposed of,

(v) how the proposed system participant will assist the applicant to provide service pursuant to an order under section 15 of the Act,

(vi) the proposed system participant’s obligation to maintain records, the address where the records will be maintained and the proposed system participant’s obligation to allow the applicant access to them,

(vii) the proposed system participant’s obligation to make periodic or other reports to the applicant,

(viii) the proposed system participant’s obligation to allow the applicant or an inspector access to their facilities in order to monitor compliance with the proposed system participant’s data protection plan and the proposed system participant’s command protection plan, if any, and

(ix) the obligation of the proposed system participant to allow the applicant or an inspector access to their facilities in order to monitor compliance on the part of the applicant with the applicant’s command protection plan and data protection plan and the applicant’s requirements under the Act, these Regulations and the conditions of the licence.
### PART 1

**REMOTE SENSING SPACE SYSTEMS ACT**

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<tr>
<th>Item</th>
<th>Provision of the Act</th>
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<th>Column 3 (Maximum Penalty — in any Other Case ($))</th>
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### PART 2

**REMOTE SENSING SPACE SYSTEMS REGULATIONS**

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## PART 3
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**CONDITIONS IMPOSED BY THE REMOTE SENSING SPACE SYSTEMS ACT**

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<th>Item</th>
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**CONDITIONS IMPOSED BY THE REMOTE SENSING SPACE SYSTEMS REGULATIONS**

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## PART 3
### CONDITIONS DE LA LICENCE
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**CONDITIONS PRÉVUES PAR LA LOI SUR LES SYSTÈMES DE TÉLÉDÉTECTION SPATIALE**

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#### SECTION 2
**CONDITIONS PRÉVUES PAR LE RÈGLEMENT SUR LES SYSTÈMES DE TÉLÉDÉTECTION SPATIALE**

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QUESTIONNAIRE FOR INDEPENDENT REVIEW OF THE REMOTE SENSING SPACE SYSTEMS ACT

Background

This questionnaire covers the main issues that the team of the Institute of Air & Space Law wants to address in the independent review of the Canadian Remote Sensing Space Systems Act. Your help and view on them is very important for us. You do not need to answer all the questions: information about any of them that you find relevant to your activities, or you can address due to other reasons, is much appreciated.

In general:

1. Overall, does compliance with the RSSS Act and Regulations stifle or facilitate the development of technology?
2. Licensing Fee: Does the imposition (and level) of a licensing fee amount to an obstacle to the procurement of licenses for remote sensing activities in Canada? To what extent does this impact upon development of technology and compliance with Canada’s international obligations?
3. Licensing process: Given that the Minister is allowed to keep an application for a period of 180 days before indicating whether there are any issues to be resolved for a decision to be reached, are there any delays in the licensing process occasioned by bureaucratic procedures? What is the impact of any such delays on the development of technology for remote sensing?
4. Are there any other restrictions/prohibitions on technological development flowing from the implementation of the provisions of the Act and Regulations? If so, what is the best way of resolving them so as to facilitate the achievement of the objects of the law?

From the RSSS Act

1. Is there a need to change “remote sensing” into “Earth observation to make it consistent with the terminology used in practice?
2. Does it make sense to adopt a differentiation between three types of data and information as per UN Remote Sensing Principles, instead of the two-tier differentiation currently applicable in the RSSSA?
   a. the US approach: unenhanced – unprocessed or preprocessed signals and imagery products
   b. German approach – no differentiation of the status depending on the level of processing
3. Is the definition of the “transformation” of data into product adequate? Does it have the potential to hinder commercial utility of Earth observation (EO) data (in whatever form)?
4. “Conditions specified by Minister — raw data (6) In a licence, the Minister may authorize the communication of raw data or classes of raw data from the licensed system to any persons or classes of persons other than the licensee or system participants on any conditions that the Minister considers appropriate. The conditions may include requirements that, in specified cases or circumstances, the communication of the raw data (a) be subject to the Minister’s prior approval; or (b) be done only under a legally enforceable agreement, entered into in good faith, that includes measures respecting their security or their further communication. The receipt, communication, processing or storage of raw data by such persons is not a controlled activity.”
Question: What exactly is its value of the passage highlighted in bold? Would not any agreement that an operator usually signs with data recipients qualify as such? Or is this an agreement that should specifically be concluded between the operator and the person authorised by the Minister? NB that the same clause is present in the following paragraph (7)

5. Section 6: Extension of scope of application of license requirement to activities carried on outside Canada by Canadian citizens, PRs, Canadian corporations and members of prescribed classes of persons having a substantial connection to Canada in relation to remote sensing space systems. Question: How has this requirement affected commercial business decisions particularly those involving the conduct of remote sensing activities outside of Canada? How have Canadian citizens, PRs and corporate entities dealt with the possibility of having to undergo dual licensing by two different countries? Has this impeded the development of technology in any way?

6. Section 8(5)(a) – Conditions relating to the use of cryptography and information assurance measures: Have any such conditions been specified in the licenses issued to date? If so, to what extent has this impeded or facilitated the development of technology and enhanced the competitive advantage of Canada’s remote sensing industry?

7. Is the distinction made in 8 (6) and (7) between “authorisation to communicate raw data” and “restriction to provide remote sensing products” to third parties really necessary? Should the operator in fact have more, or less freedom to decide the fate of raw data than he has with regard to remote sensing products?

8. Term of the validity of the licence “for the period that the Minister considers appropriate” – Would licensees prefer that this be changed to a specified fixed term? e.g., 3, 5, 10 or 15 years? Would such a change enable licensees to optimize their operations and/or investments in technology?

9. The conditions of “Amendment of system disposal plan or arrangements”, “Amendment of conditions on Minister’s initiative” and “Cancellation of licence” are different, even though, in essence, the only difference is that in the latter two “the protection of the environment, public health and the safety of persons and property” are missing. What is the logic behind this decision? The reason why it appears strange to me is that without the approval of the disposal plan, the Minister will not issue the licence. Hence, suspension or cancellation of the licence should be subjected to the same assessment.

10. To what extent do the disposal requirements impede or facilitate the development of remote sensing technology and enhance the competitive advantage of Canada’s remote sensing industry? Is the amendment procedure for system disposal plans flexible enough to accommodate emerging technologies such as on-orbit servicing of satellites?

11. The differences between and the consequences of “suspension of the licence” and “interruption of operations”. Cf. licence can be suspended up to 90 days (11(1)), whereas the operations can be interrupted “for the period specified in the order” of the Minister. Can interruption exceed the term of suspending the licence? In essence, what are the key differences between the two actions apart from the most obvious one that interruption is probably or most often more narrow than the suspension (even though suspension can also be “in whole” or in part)?

12. Priority access – does this provision affect the industry? Is it detailed enough? Does it unnecessarily restrict economic freedom of the operator?

13. Question for DND and CSA: With respect to remote sensing system(s) operated by DND or CSA, Section 4(1) of the Act authorizes Cabinet to make an Order providing that the Act and any Regulations made thereunder apply to the system in such manner and to the extent provided for in the Order. Question: Have any such Order(s) been made? And if so to what extent do they adapt the provisions of the Act and Regulations in connection with remote sensing systems operated by DND and CSA?
5. “Sales order” means an order for raw data or a remote sensing product, including an internal order within a licensee or system participant for raw data or a remote sensing product. Is the clarification highlighted in bold necessary?

6. Control: “(2) An entity is controlled by a person if the person has control in fact, whether directly through the ownership of securities or indirectly through a trust, an arrangement, the ownership of any corporation or other means.” Affiliation: “(3) One entity is affiliated with another entity if one of them is controlled by the other or both are controlled by the same person.” What is the value of the term “affiliation”? Particularly since it is defined through the notion of control.

7. “All applications:
8. For the purposes of subsection 8(1) of the Act, the prescribed factors are the following:
   (a) the ability of the applicant to comply with the Act and these Regulations; and
   (b) the enhancement of the competitiveness, at the national and international levels, of the Canadian remote sensing space industry.” Are these prescribed conditions good enough? Does the “enhancement of competitiveness” contribute to the development of technology or do these two factors work at cross purposes? From a practical perspective, do you find any inconsistencies in the prescribed factors? Are there any amendments you would recommend to streamline the licensing regime?

8. Is the definition of the “Process considered to transform raw data” accurate and adequate? Or is the definition too broad? What is the effect of this definition on commercial remote sensing operations and how has it influenced the development of technology?
   “Any process or series of processes operating on raw data that rectifies errors, distortions and other artefacts of the system by pixel aggregation, averaging or resampling are considered to transform the raw data if the process or series of processes also (a) radiometrically calibrates the data; or (b) geocodes the data with respect to features of the Earth by resampling.”

9. PRIORITY ACCESS ORDERS – Is the prescribed basis for calculating the amount payable by the Minister appropriate and adequate? Cf. German Act, particularly since this provision is contained in the Act itself and not in the subsidiary regulations. Would such amendment make sense?

10. How necessary are all these? 15. (1) A licensee must, as soon as feasible, notify the Minister in writing if the licensee has reasonable grounds to believe that
   (a) the licensed system poses a danger to the environment, public health or the safety of persons or property;
   (b) the licensee has lost or is in danger of losing control of a remote sensing satellite;
   (c) the cryptography used in communications with the remote sensing satellite or the information assurance measures for the licensed system are malfunctioning;
   (d) an unauthorized communication of raw data has occurred;
   (e) the provision of a remote sensing product has been provided in breach of a condition imposed under subsection 8(7) of the Act; or
   (f) there has been a breach in the security of the licensed system.

11. Does it make sense to introduce into the Act provision similar to that in the US Land Remote Sensing Policy Act that stipulates that after a certain period of time data from any remote sensing satellite system should be introduced into a publicly maintained (archive) database?

12. Para. 25 Violations: are they proportionate/fair? If you think any changes are needed, specify which and why?

13. Would a table of (data provision) risk assessment like in SatDSG be helpful for Canadian industry?
14. Reference to frequencies: Schedule 1, 17(2): The radio-frequency link information for command uplinks, including the characterization of each link and the type of information carried by each communication channel. Schedule 1, 25(2): The radio-frequency downlink information, including the characterization of each link and the type of information carried by each communication channel.

15. Is there a legal basis for the obligation cast upon licensees under the Regulations to promptly submit to the Minister reports on design review (both preliminary design review and critical review phases), launching, operationalization, and failure of remote sensing satellites? Given that these documents are not included in the supporting documentation required for an application and without express provisions in the Act and/or Regulations, can the information contained in these reports be used by the Minister as a basis for suspending or cancelling previously approved licenses? What impact does this reporting obligation have on the development of technology? (i.e., does the licensing process extend to approval of the launch vehicle as well as the design characteristics of the system?)

16. What is the impact of the heavy record keeping obligations upon the development of technology and the commercial viability of Canadian remote sensing operations?