Security and Surveillance

September 11th, Courtesy of Readio.com

Canada recently articulated its first National Security Policy (NSP), *Securing an Open Society*. It addresses three main security interests:

- Protecting Canada and Canadians abroad;
- Ensuring Canada is not a base for threats to our allies; and
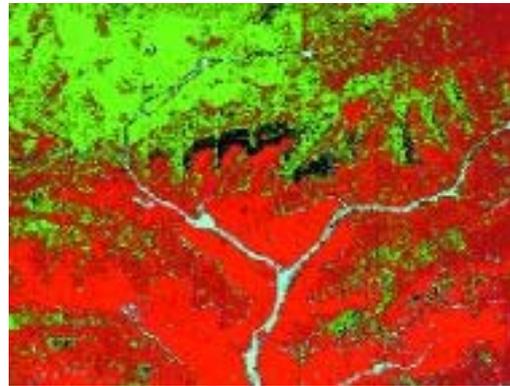- Contributing to international security.

It is clear that security is much broader than the traditional national interest domain. It encompasses a range of personal and societal issues that are important to Canada. The NSP identifies six key security areas of concern:

- Intelligence;
- Emergency Planning and Management;
- Public health Emergencies;
- Transportation Security;
- Border Security; and
- International Security.

The main threats of concern to Canada as identified in the NSP are: terrorism; proliferation of weapons of mass destruction; failed and failing states; foreign espionage; natural disasters; critical infrastructure vulnerability; organized crime and pandemics.

Canadian Coast Guard, courtesy DFO

An aerial photograph shows a suspected marijuana "farm" in the United States, along with forests, licit row crops, upland crops and roads. The multispectral digital imaging system (MDIS) allows investigators to differentiate among the crop types present. courtesy Geoplace.com

---

"Hot" issues:
- Canada's role in American Missile Defence;
- Northern and coastal surveillance;
- Terrorist threat: chemical, biological, radiological, nuclear (CBRN);
- Health pandemics (SARS, avian flu);
- North American Security and increased North American integration (Smart borders);
- Emergency planning and management – increasing our preparedness;
- Integrated threat assessment with allies.

Key players

Public Safety and Emergency Preparedness Canada is responsible for protecting Canadians and helping to maintain a peaceful and safe society including emergency preparedness, crisis management, national security, corrections, policing, oversight, crime prevention and border functions. Six agencies report to the minister: the Royal Canadian Mounted Police, the Canadian Secret Intelligence Service, the Correctional Service of Canada, the National Parole Board, the Canada Firearms Center and the Canada Border Services Agency. (http://www.psepc-sppcc.gc.ca)

The **Canadian Security Intelligence Service** (CSIS), reporting to the Minister of Public Safety, is responsible for protecting the national security interests of Canada and safeguarding its citizens. The main objective of the Service is to investigate and report on threats to the security of Canada, an objective that it pursues while respecting the law and protecting human rights. (http://www.csis-scrs.gc.ca)

The **Department of National Defence** (DND) is responsible for Canada's military space program, and undertakes activities in conjunction with the CSA and other federal government departments, when a dual military-civilian use is identified. Space assets are also brought to bear in support of Canadian Forces overseas activities such as UN-sponsored peacekeeping missions. DND is also responsible for northern defence and for monitoring our coastlines in defence of Canadian sovereignty. http://www.dnd.ca

Fisheries and Oceans Canada (DFO) is responsible for overall management of Canada's oceans and coastal zones, as well as for the Canadian Coast Guard (security, enforcement, oil spill monitoring, marine traffic). http://www.dfo-mpo.gc.ca/index.htm

The **Canadian Coast Guard** is to manage, maintain, and provide aids to navigation in Canadian waters in order to facilitate safe and expeditious movement of maritime traffic to protect the marine and freshwater environment, maintain maritime safety and to facilitate maritime commerce and ocean development. Helicopter and icebreaker patrols, coupled with video or satellite images, perform reconnaissance for the ice management/routing centre, which monitors an area extending from the Gulf of St. Lawrence to Montreal. http://www.ccg-gcc.gc.ca

The new **Cabinet Committee on Security, Public Health, and Emergencies**, chaired by the Minister of Public Safety and Emergency Preparedness, was created to manage national security and intelligence issues and activities and coordinate government-wide responses to all emergencies, including public health, natural disasters and security. http://circ.jmellon.com/committees/ccsphe

Canada's new National Security Policy also announced the appointment of a **National Security Advisor to the Prime Minister** and the establishment of **National Security Advisory Council**.

The EU and ESA have recently embarked on a **Global Monitoring for Environment and Security** program (GMES) which aims to provide both classified and unclassified information on security issues; it is strongly indicative of the broader approach adopted internationally with regard to security. http://www.gmes.info

The US **Department of Homeland Security** (DHS) has three primary missions: prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage from potential attacks and natural disasters http://www.dhs.gov/dhspublic

The US **National Geospatial-Intelligence Agency** (NGA) formerly National Imagery and Mapping Agency (NIMA) provides timely, relevant, and accurate geospatial intelligence in support of national security objectives. By giving customers ready access to geospatial intelligence, NGA provides support to civilian and military leaders and contributes to the state of readiness of U.S. military forces. NGA also contributes to humanitarian efforts such as tracking floods and fires, and in peacekeeping. http://www.nima.mil

The US **Central Intelligence Agency** (CIA) provides accurate, comprehensive, and timely foreign intelligence on national security topics and conducts counterintelligence activities, special activities, and other functions related to foreign intelligence and national security, as directed by the US President. http://www.cia.gov
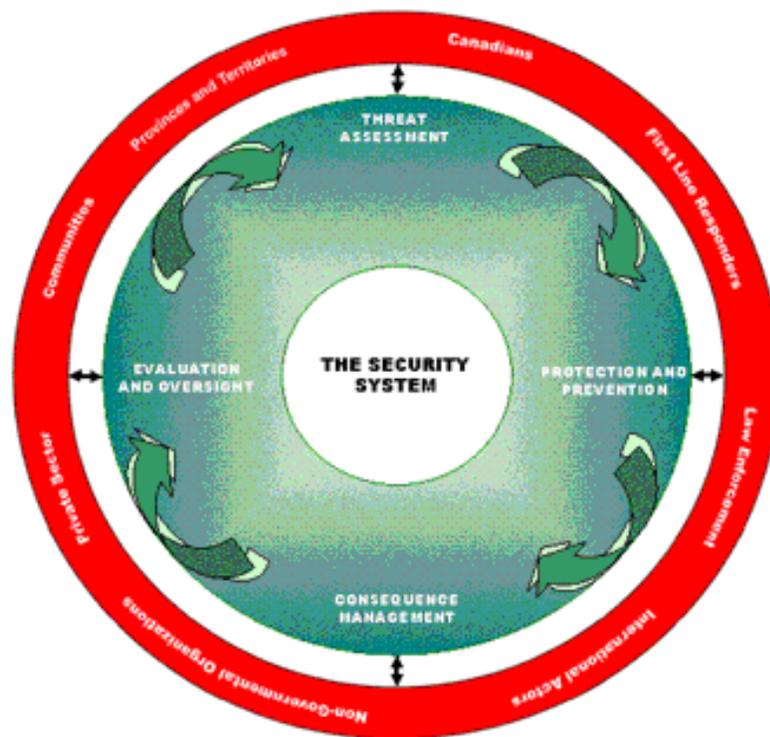
Space and Security

Space has a major role to play in relation to security and surveillance both in Canada and internationally.

In Canada, space is critical to providing situational awareness of the vast land and oceans that make up Canada's territory. Only space offers the scope and reach to provide up-to-date information on all of Canada. While space alone cannot address security risks, space when properly integrated in a national security system provides unique coverage and allows efficient tasking of resources.

Space is also of great use in predicting, responding to and assessing the damages from disasters. This is true of both space-based EO and, during the disaster itself, space-based communications.

Internationally, space data provides verification of information or suspicions in areas where it is not possible to send operatives. Such surveillance information is critical to identifying new risks and tracking existing risks.

Courtesy of Government of Canada

Issues for the CSA:

- Positioning space as an effective tool to address security concerns, particularly in context of National Security Policy;
- Raising the awareness of space as a strategic Canadian asset in security and surveillance issues;
- Defining a clear strategy to address "civil" security, such as disaster management, where space has a major role to play;
- Coordination with other departments involved in security (overcoming past failures).

Related themes:
Disasters
Environmental Factors Affecting Health
Climate Change & Variability
International Development
Sustainable Water Resources
Weather
Coastal and Marine Ecosystems
North/Arctic
Great Lakes – St-Lawrence
Cities and Urban Issues
Global Monitoring for Environment and Security (GMES)

References:

Background Information:
Securing An Open Society: Canada's National Security Policy, April 2004 http://www.pco-bcp.gc.ca/docs/Publications/NatSecurnat/natsecurnat_e.pdf

Athena Global, *Space and National Security: how civil and commercial space contribute to Canadian security*, unpublished, May 2004.

HENK, Dan, *Security: A new African Paradigm*, Occasional Paper No. 1, University of Zimbabwe. http://www.uz.ac.zw/units/cds/occasional/paper1/

Latest update:
Newsroom of Public Safety and Emergency Preparedness Canada http://www.psepc-sppcc.gc.ca/newsroom/index_e.asp

News page of the Canadian Security Intelligence Service http://www.csis-scrs.gc.ca/eng/new/whatnew_e.html

Closer look:
Istituto Affari Internazionali, International Report on Space and Security Policy in Europe, Rome 2003
http://esamultimedia.esa.int/docs/SpaceSecurityExecutiveSummaryFinalIAI.doc

The Canadian Security and Intelligence Community: Helping Keep Canada and Canadians Safe and Secure, Privy Council Office, Canada May 2001
http://www.pco-bcp.gc.ca/default.asp?Language=E&Page=publications&doc=si/si_toc_e.htm