

Safety and Security Knowledge and Technology Forum and SecureTech 2014

On 3-5 November, 2014, DRDC CSS partnered with the Canadian Association of Defence and Security Industries (CADSI) to have a large CSSP presence at the Annual SecureTech Conference and Tradeshow. DRDC CSS led the Safety and Security Knowledge and Technology Forum, which allowed attendees to learn about the CSSP and its immediate and long-term needs as well as discover opportunities to leverage innovations and technologies in critical areas of public safety, emergency management and security. Partners from industry and government presented on CSSP projects focused on emerging or transitioning technologies to highlight opportunities and next steps for these being transitioned into operations.

During the SecureTech Tradeshow, DRDC CSS had a booth and poster session to highlight CSSP projects, which attracted many people in the public safety and security fields wanting to learn about the program. DRDC CSS was also well represented during the SecureTech conference panels by Portfolio Manager Paul Hubbard, who participated in the Border Security panel and Carey Larsson, Section Head, Threats and Hazards who was a member of the Counter-Terrorism panel. DRDC CSS will continue to look for opportunities such as SecureTech to facilitate knowledge sharing, foster new collaboration efforts, organize panels of distinguished experts on important emerging topics, and highlight the important efforts of CSSP and its partners in enhancing the safety and security of Canadians.

Where There's Fire, There's Smoke

By Kerry Anderson

Every year Canada typically experiences 8,000 forest fires resulting in dozens of evacuations of communities due to smoke. Health alerts impacting the lives of millions of Canadians are issued each summer due to the negative health effects of smoke exposure. Industries and tourism are also affected by smoke.

The 2014 fire season was exceptionally severe, with fires raging in British Columbia (B.C.) and in the Northwest Territories (N.W.T.). End of season estimates suggest a total of 4,883 fires burned 4,607,677 hectares (or 46 thousand square kilometres) – an area which is equivalent to 80% the size of Nova Scotia. This was the worst season since 1998 (4,614,287 ha) and a record-breaking one for the N.W.T. One of the major impacts of these fires was the smoke that blanketed much of western Canada for the months of July and August. Several air quality advisories were issued from BC to Manitoba for urban centres such as Vancouver, Edmonton, Kamloops, Prince Albert, Yellowknife and others.

The ability to track and forecast the movement of smoke is critical to developing these advisories and ensuring that Canadians have access to the information they need to make decisions that impact their health and safety. ➤

» National Smoke Forum

To help promote the importance of tracking and forecasting smoke from wildland fires, the National Smoke Forum was held on October 10, 2014 in Halifax, N.S. The objective of this meeting was to conduct an information exchange with users of smoke forecasting systems such as BlueSky in Canada. The meeting was held in conjunction with the Wildland Fire Canada 2014 conference to maximize participation from the fire community as well as to introduce health agencies to the fire community. Forty-two people attended this meeting along with 35 others who connected remotely. Attendees included fire, environment, and health and safety experts from federal and provincial agencies as well as from the United States. A result of this meeting is an effort to define a national standing forum or national coordinating body for smoke and air quality that can help the future direction of smoke forecasting and research as well as increase our understanding of the health impacts in Canada.



» The BlueSky Canada Project

The importance of smoke forecasting was recognized by governmental agencies and an effort to create a smoke forecasting system was initiated. In 2007, a workshop was held in Edmonton, which included provincial and federal agencies in charge of resource management, public health, and the environment. This led to an initial strategy, which aimed to test the BlueSky modeling framework, a system developed by the U.S. Forest Service (USFS), in Canada. A prototype system was implemented at the University of British Columbia (UBC) and smoke forecasts for British Columbia and Alberta were initiated in August 2010.

In 2012, four federal and provincial agencies submitted a proposal to the Canadian Safety and Security Program (CSSP) to support the development of the BlueSky Canada project: a smoke forecasting system that predicts smoke from wildland fires, which was accepted in 2013. The system produces smoke forecasts for all of Canada south of the Arctic Ocean. Forecasts are produced twice a day using the latest forest fire information. The system is able to handle information about thousands of fires and process data on the emissions, transport and dispersion of smoke in concert with weather forecasts. These smoke forecasts are available to the public at FireSmoke.ca. There were a quarter of a million views of this website during the 2014 fire season – an indicator of the importance and relevance of smoke forecasting to Canadians.

BlueSky Canada operates out of the Geophysical Disaster Computational Fluid Dynamics Center at UBC. It involves a team of fire and meteorological experts from Natural Resources Canada, Environment Canada, Parks Canada, British Columbia Ministry of Environment, Alberta Ministry of Environment and Sustainable Resource Development, and UBC.

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Connect



Fall 2014 | Issue 4

Balancing Investments across the Safety and Security Landscape

By Mark Williamson, Ph.D

Supporting Operational Acquisitions through CSSP Investment

By Paul Hubbard

Technical Support Working Group: A key Partnership for S&T Collaboration between Canada and the U.S

By Britton MacDonald

Fighting the West African Ebola outbreak on all levels

By Dr. Jim Strong and
Dr. Trina Racine

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Where There's Fire, There's Smoke

By Kerry Anderson

CSSP partners now have the opportunity to work with Sweden on S&T projects for public safety and security

Are you a member of a CSSP project looking for additional commercialization/ operationalization support?

Welcome to the Fall Edition of CSSP Connect.

One year has passed since we launched the first issue of CSSP Connect and it is thanks to your insightful contributions that we have been able to deliver four content rich Newsletters. The security landscape continues to be dynamic and a constant reminder of the value of our collaborative efforts to enhance the safety and security of Canadians.

In this issue, you will find a feature, which describes how we balance investments across the safety and security landscape and the challenges that come with it. You will also learn about how our program funding was instrumental in developing the Ebola treatments that have made Canada a key player in current global efforts against the West Africa outbreak. You will read about a smoke forecasting system that is playing a key role in safeguarding the health of Canadians during wildland fires, as well as how previous program investments helped the RCMP make informed decisions surrounding future security investments. This issue will also highlight recent DRDC CSS activities, such as the Safety and Security Knowledge and Technology Forum at SecureTech 2014, a new S&T agreement between Canada and Sweden, and our partnership with the U.S. Technical Support Working Group (TSWG).



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Balancing Investments across the Safety and Security Landscape

By Dr. Mark Williamson

Balance: the distribution of projects deemed necessary to deliver measurable impact across the established suite of program outcomes.

Establishing a balanced suite of investments to support projects that contribute to keeping Canada safe and secure is arguably the most important thing we do. The challenge is to avoid spreading the resources too thinly across the broad dimensions of the safety and security landscape or, alternatively, focusing too much on one in particular. Both of these circumstances would inevitably hinder our ability to deliver on program outcomes.

In assessing investment opportunities and decisions, DRDC CSS, in partnership with Public Safety Canada, strives for a multi-year balance of investment profile reflective of the guidance and direction received through our governance and strategic planning processes.

In order to achieve a balanced portfolio of investments, we focus on an analysis of the existing balance as a prelude to the following question: is the balance reflective of the policy and operational imperatives as they are understood today? This is a question we put to the CSSP Steering Committee in governance terms. Good governance is a key contributor to our work which we continue to strengthen through the formalization of our strategic documents (Program - and Portfolio- Narratives, Environmental Scan, and Strategic Planning Guidance). ➤