



Introduction

Welcome to the ESRI Canada Spatial Data Infrastructure (SDI) Monthly Newsletter. The purpose of this informal newsletter is to educate and inform interested ESRI clients about what's happening in Canada and globally related to SDI.

Special Feature: Executive Interview with Sylvain Latour, Director, GeoConnections

Sylvain Latour was recently appointed Director of GeoConnections at Natural Resources Canada. Sylvain has kindly answered a few questions about GeoConnections and the Canadian Geospatial Data Infrastructure (CGDI). We would like to thank him for his input.

1) Would you give us a brief summary of the GeoConnections program?

GeoConnections is a national partnership program led by Natural Resources Canada. The program works with partners in four thematic areas (public health, public safety and security, environment and sustainable development, and Aboriginal matters) and in the geomatics technology development domain. GeoConnections works with these partners to ensure that decision-makers in key areas benefit from the Canadian Geospatial Data Infrastructure (CGDI).

The program is in the middle of its second five-year phase of federal government funding. The first phase (1999-2005) concentrated on developing and establishing the CGDI; the second phase (2006-2010) is targeted toward improving and increasing CGDI usage in the four thematic

areas while continuing to strengthen and enhance CGDI core technology solutions.

2) What are the program's major accomplishments to date?

All to the credit of my predecessors, I am pleased to say that we have a series of well established advisory committees to guide the program and align our objectives precisely with community needs. We are also involved with more than 100 projects involving all communities. These projects are in various stages of completeness.

In addition, we are continuing to maintain and operate core CGDI components while at the same time renewing the CGDI's underlying technology. In fact, we are seeing more and more off-the-shelf geospatial products adhere to CGDI data standards, a development that we credit in large part to the first phase of the GeoConnections program. Finally, we now have agreements to maintain framework data through GeoBase, and we are embarking on an initiative to develop new layers.



3) Recently, the Announcement of Opportunity process was substantially redesigned. Has the redesign accomplished its purpose?

Yes, the new integrated Announcement of Opportunity (AO) process has accomplished much of its purpose by streamlining and simplifying how partners apply for GeoConnections funding. The new simplified process has helped proponents

see both the range of projects that GeoConnections supports and the best entry points for their initiatives. In general, these changes led to our receiving project proposals that were both higher quality and better aligned with funding opportunities than proposals we received in the past.

A new round of the integrated Announcement of Opportunity was recently opened and will remain open until October 12, 2007. Other targeted opportunities are soon to be available as well, such as an invitation to authoritative data suppliers to publish their data using CGDI-endorsed standards.

4) Do you foresee any further changes to the Announcement of Opportunity process?

We foresee no major changes for the process, only minor tweaking until the end of the program. We will continue to take advice from our advisory committees on specific needs for our communities, and we will tailor our opportunities accordingly.

5) How can organizations take advantage of GeoConnections to spatially enable their organization?

GeoConnections can provide guidance and funding for projects. I encourage everyone who wants to use or to enhance their use of geospatial data and technologies to get in touch with one of our representatives. This person can explain how geospatial information in general and the CGDI in particular can help you make better decisions. For more information, please visit the following web site:

<http://www.geoconnections.org/en/communities.html>

6) The CGDI can be technologically complicated. Is GeoConnections doing anything to help casual GIS users understand and use the CGDI?

Casual GIS users should not have to worry about the background or hidden technologies that

support the CGDI. We encourage users and potential users to take advantage of Canada's highly knowledgeable private sector to bridge the gap between user needs and technological solutions. We work closely with industry and professional associations to facilitate networking between those with needs and those with solutions.

Moreover, developments in the geomatics industry are making it easier for communities of practice to implement and use standards.

For instance, GeoConnections is working with organizations such as the Open Geospatial Consortium (OGC) to develop "agile" standards such as Geographically Encoded Objects for Real Simple Syndication (GeoRSS) or feeds. These standards make it easier to implement and share location-based information. As well, recently the ISO/TC 211 Committee on Geographic Information and Geomatics has been looking to develop thematic-oriented standards, e.g., land-cover classifications.

Currently, GeoConnections is focused on making geospatial technologies and information available to decision-makers in its four priority areas. As technology and expectations have advanced, however, companies such as Google and Microsoft have started to provide geospatial products to the public. This trend is also helping casual users adopt GIS solutions.



7) Given that many of the basic standards and technologies to exchange spatial data are available, what Canadian data is accessible through the CGDI?

Multiple federal departments make their data available through the CGDI portal, as do numerous provincial and territorial agencies, municipalities, and other non-government groups.

We are also extremely pleased to be part of the GeoBase initiative to provide Canadians with authoritative, closest-to-source framework data. For an overview of contributing agencies, see <http://geodiscover.cgdi.ca/gdp/search?action=searchForm&entryType=organization>

Although much has been done, there is still an enormous gap in data availability. We are studying the data needs of our communities to better understand those gaps and to better direct users to the resources available.

8) A GeoConnections report some time ago indicated that Web Feature Service (WFS) still had a long way to go before it was ready for widespread use. How is GeoConnections making more CGDI data available via Web Feature Service?

Today, several WFS implementations are available and are documented in the GeoConnections Discovery Portal web services section.

Looking forward—in relation to distributed access using the WFS implementation specification—GeoConnections is conducting a CGDI Interoperability Pilot (CGDI IP) project. This pilot will test the feasibility of open standards-based technology, i.e., WFS, to manage and disseminate CGDI data more effectively.

In particular, the pilot will provide GeoBase users with access to the most current and authoritative data, thereby maintaining data currency, avoiding multiple data versions, and minimizing data duplication. Also, the CGDI IP aims to develop a collaborative technical network with our provincial and federal partners to implement the operational GeoBase Network and to advance the CGDI's development.

9) What is your view on technical standards? Do we need more standards or should developers “bullet proof” their existing technology using the current suite of interoperability standards?

The best standards are both ubiquitous and transparent, so transparent that people forget that the standards exist. Although most geospatial standards have yet to reach that level of maturity, GeoConnections strongly advocates the use of emerging national or international standards.

The current suite of interoperability standards as developed by the International Standards Organization (ISO) and OGC is the backbone for data sharing. But every day, new standards are proposed and developed; GeoConnections will continue to play a role of facilitator and catalyst for their acceptance and integration within the CGDI. We cannot do this work alone and are therefore encouraging coordination both nationally and internationally using accredited and non-accredited committees, e.g., the Canadian General Standards Board, the Standards Council of Canada, the Treasury Board of Canada Secretariat, ISO/TC 211, the Open Geospatial Consortium, etc.

10) What would you like to see as your contribution and legacy to the CGDI?

Many people are responsible for the creation and evolution of the CGDI. The future will continue to challenge us to evolve and adapt to new realities. I am confident that the visionaries, innovators, builders, and users will rise to that challenge.

I am simply happy to be a part of that group.

For more information on the GeoConnections program, visit <http://www.geoconnections.org>

ESRI Technology and INSPIRE

The “*ESRI Technology and INSPIRE*” document describes how ESRI GIS software products and solutions align with Spatial Data Infrastructures in general and the Infrastructure for Spatial Information in Europe (INSPIRE) initiative in particular. The document



outlines the vision for European geospatial information sharing and the technical foundation for activating that vision using ESRI Technology. <http://esri.com/library/whitepapers/pdfs/esri-technology-and-inspire.pdf>

Spatial Knowledge and Information Conference

The Spatial Knowledge and Information Canada Conference will bring researchers and developers together to discuss spatial knowledge and information for GIS and the GeoWeb. <http://rose.geog.mcgill.ca/ski/>

Published Articles of Interest

This article describes the status and plans for the National Land and Water Information Service (NLWIS) project http://www.directionsmag.com/article.php?article_id=2538

NRCan have published the first GeoBase Newsletter. http://www.geobase.ca/doc/newsletters/GeoBase_Newsletter_Fall2007_en.pdf

This article describes the trials and tribulations of implementing the NSDI of India. http://mycoordinates.org/nsdi_august2007.php

A new book on The GeoSpatial Web has been published. <http://www.geospatial-online.com/geospatialolutions/article/articleDetail.jsp?id=459282&contextCategoryId=36219>

GSDI Outreach Activities of Interest

The GSDI Association has created a discussion list for North America. <http://lists.gsdi.org/mailman/listinfo/sdi-northamerica>

The September issue of the GSDI Annual Newsletter is now available. <http://gsdi.org/newsletters/GSDI/GSDInewsletterSept07.pdf>

The next issues of the Regional GSDI Newsletters are now available.

<http://www.gsdi.org/newsletters/SDILACv4n9English.pdf>



Beginners Corner: What is the Difference between Open Source and Open Standards?

There is often confusion between Open Source and Open Standards. These terms apply to quite different things, but are often confused.

The term Open Source generally means the source code for computer programs that are distributed to the general public with little or no intellectual property (IP) restrictions. Declaring software Open Source allows developers to distribute the code to others for modification or further distribution. The opposite of Open Source Software is Proprietary Software.

The term Open Standard is used to describe a set or suite of standards that have little or no intellectual property (IP) associated with their use and can be used in either open source or proprietary software. These standards are generally developed and approved by formalized committees that have open membership and agree to standards on a consensus basis.

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