GSDI AND IGS GLOBAL NEWS
News from the GSDI Association and the International Geospatial Society
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ASSOCIATION NEWS

Meet the New GSDI Association Officers

Prof David Coleman (Univ. of New Brunswick) and David Lovell, (EuroGeograhpics) assumed their respective posts as the new President and President-elect of the Association in May.

David Coleman, geomatics professor and the Dean of Engineering at the University of New Brunswick, Canada, said that "over the next three years, we must become even more relevant to the needs of people and institutions in emerging nations. We will accomplish that through the combined efforts of a dedicated Executive, a committed volunteer Board, and our member organizations." Prof Coleman also recognizes the special importance of GSDI's International Geospatial Society (IGS) and encourages individual input through the GSDI Association's LinkedIn discussion group and the IGS LinkedIn sub-group. The 'article of the month' in this issue is from Prof Coleman.

President-elect Dave Lovell, Executive Director of EuroGeographics, brings the GSDI Association back to its roots, representing public sector mapping organizations that formed the core of the Association when the GSDI Conferences were first held, beginning in 1996 in Bonn, Germany. Dave notes that "geo-information today touches more people's lives than at any other time in history. GSDI has an important continuing role in ensuring better understanding of its many benefits."

New GSDI Association Members

At the GSDI Association Council and Board meetings held prior to and following the GSDI 13 Conference in Quebec in May, new Council members were elected (report to follow) and two new Members were welcomed into the Association – the **Latin American Development Bank (CAF)** and **PSMA Australia**, bringing the number of full Members of the Association to 42. Mr Eric van Praag, representative of CAF, also assumed his new role on the Technical Committee.

GSDI COMMITTEE NEWS

GSDI Standing Committees recommend programs of action to the GSDI Council and Board and carry out specific tasks as set out in the GSDI bylaws or as requested by the Council or the Board. Individuals interested in contributing to the work of committees should contact the committee chairs, via the GSDI Committees web site at http://www.gsdi.org/standingcomm. All current Committee members are encouraged to send their news to the Editor (ral@alum.mit.edu) for including in future issues of the Newsletter.

Outreach & Membership Committee

With former Chair, Steven Ramage, leaving OGC® and taking up a new post at the Ordnance Survey in Great Britain, in International Development, OGC's Mark Reichardt has resumed his previous post as Chair of the O&M Committee, assisted by Roger Longhorn, who remains vice-Chair, Communications. In developing the new work plan for the Committee, prior to Steven's departure, he and Roger had decided on a 'regional' focus that would cover both the outreach and membership aspects of the Committee. To that end, five new regional vice-Chairs have been proposed (and accepted their appointments, to be confirmed by the Board shortly). These are:

- Americas: Nancy Aguirre
- Europe: Joep Crompvoets
- Africa: Sives Govender
- Middle East: Dr Khalid Al-Haidan
- Asia-Pacific: Dr Tien-Yin Chou

Vice-Chair Longhorn has also taken charge of the GSDI Association *LinkedIn* group, which continues to be active and we encourage all readers to join the group at www.LinkedIn.com.

Organised by Societal Impacts vice-Chair, Jeremy Shen, the O&M vice-Chairs Roger Longhorn and Joep Crompvoets were guests of the Min. of the Interior in Taiwan during the week of 14 August, as keynote speakers at the Taiwan Geoportal One Stop (TGOS) seminar on the 15th, and then meeting with Ministers, Vice- and Deputy-Ministers or heads of organisations in various other government departments, to learn more about how SDI has been developed and implemented in Taiwan. They found that the SDI work is very advanced there, and that research organisations are well entrenched in standards development work with organisations such as the Open Geospatial Consortium. One of the main drivers for developing the SDI is the need for disaster planning, monitoring and mitigation, due to the number of severe storms and earthquakes the periodically hit the island. A full report of the seminar and the visit will be published in the SDI Magazine in September (visit www.sdimag.com).

Legal & Socioeconomic Committee

Dr Gabor Remety-Fülöpp (Secretary-general, HUNAGI) co-authored a paper on '*Legal Aspects of Public Sector Information and Re-use*' to be presented at the 4th Digital Earth Summit, 2-4 September 2012, in Wellington, NZ. Dr Remety-Fülöpp is a member of the EU-funded "Legal Aspects of Public Sector Information" (LAPSI) project, as is GSDI O&M vice-Chair, Roger Longhorn, who serves on the LAPSI Advisory Board. The initial LAPSI project has concluded, but a 3-year follow-on project has been funded by the European Commission, beginning later this year.

Societal Impacts Committee

As reported in our previous issue, Committee vice-Chair, Jeremy Shen, provided a free training opportunity for three candidates from Latin America to attend the ICLPST (International Center for Land Policy Studies and Training) training seminar on GIS and Land Management, in Taipei, Taiwan, 12-25 September, 2012. The Committee is also responsible for managing the GSDI Small Grants Program, for which see the reports below.

Small Grants Program Update

During July, the Association received a progress report from Ethiopia on the "Establishment of Environmental Geoportal with Open source Solutions Project", which has been published on the Association web site.

The main objective of the report is to provide information about the process, activities, and accomplishment of the geoportal project. The main aim of the geoportal is to organize the fragmented geo environmental data of the region, owned by different programmes, and to enable these data to be accessed and shared with other organizations. The prototype geoportal is still in development stages. The service of the HoA-REC/N geoportal (http://hoarec.org/index.php/geoportal-home), is hosted on the domain name of http://hoarec.org/ under the Resources main menu. The service is working on HoA-REC/N's web server and is expected to be operating in its full capacity while feedback is collected and incorporated.

The grant beneficiaries, the Horn of Africa Regional Environment Centre and Network (HoA-REC/N) focus on environmental concerns and sustainable development options within the Horn of Africa. The Centre is an autonomous institution under Addis Ababa University. It facilitates, strengthens and advocates for initiatives related to environmental conservation and natural resource management. Primary Contact for the project is Melakeneh Gelet, Horn of Africa Regional Environment Centre and Network. The report can be downloaded from http://memberservices.gsdi.org/files/?artifact_id=1080.

This project was one of the 17 projects that received financial support, or services in kind, from the Small Grants Programme, which is supported by the US Federal Geographic Data Committee and the GISCorps of URISA.

Update from Africa

In 2008, a Small Grant award was made for the African project - "Southern and Eastern African Regions (7 Nations - 7 proposals), to convene 2-day national workshops and hands-on training, leading to developing of the coastal and marine Spatial Data Infrastructure in seven nations, focused on data

quality assessment, data uploading and metadata development. The proposal called for 2-day unified intra-national workshops for Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, and Tanzania. Workshop reports for the activities carried out under the coastal and marine SDI project can be found at the following link, covering activities from December 2008 to January 2011: http://gridnairobi.unep.org/CHMPortal/jsp/progres sreports.jsp

Update from Indonesia

From the 2010-2011 program, we received this update on the "Tailor-made SDI Workshop & Training" project for "Use of GeoPortal for Integrating Community Data and SDI Layers in Support of Collaborative Efforts in Urban Disaster Reduction in Yogyakarta, Indonesia". The workshop "greatly stimulated many new initiatives in the use of SDI Layers and use of the geoportal for disaster response in the area" and "the workshop resulted in agreement on community involvement and local government's commitment to follow up has been made." Primary contact for the project is Dr Trias Aditya of Gadjah Mada University.

Update from URISA GISCorps

Project Support in Zimbabwe, South Africa and Nigeria

The request for volunteers from Zimbabwe (Savetech Solutions), South Africa (Endangered Wildlife Trust), and Nigeria (Geographical Resources for Development Centre) are either interested in developing a metadata Geo Portal (Zimbabwe and South Africa) or already have one and would like to enhance it further (Nigeria). Due to similarities between these projects (all interested in an Open Source solution), GISCorps decided to form a team of four volunteers and to provide assistance to them in a collaborative manner.

Four volunteers were selected and Karl Tiller, a Technical Advisor in the GIS Centre of Makerere University, funded by Horizont3000, is the Project Manager. The other three GIS Specialists are Raul Calderon (Guatemala), Asmat Ali (Pakistan), and Chris Nicholas (California, USA). Karl has created a wiki site and the team has been collaborating via that site.

Project Support in Sudan

A remote sensing scientist has also been recruited for a GSDI Small Grant project in Sudan. The request came from Grant Gordon, a Doctoral Candidate in the Department of Political Science at Columbia University, whose research examines how causal inference, predictive modelling, and crowd-sourced data can improve humanitarian intervention and programming. Barry Bitters, a remote sensing scientist from Science Applications International Corporation (SAIC), in Virginia has been selected for this project and is now in contact with Grant.

GISCorps Volunteer in Tanzania

Imroz Raihan, a remote sensing specialist from Bangladesh, has been deployed to a GSDI Small Grant project in Tanzania. The request for volunteer for this project came from the University of Kwazulu-Natal and Wami Ruvu Basin Office. They are interested in receiving assistance for geo-referencing, mosaicking, and classifying several Worldview imageries.

GISCorps Cadastral Mapping specialist for GSDI Small Grant Project in Uzbekistan

The National Centre of Geodesy and Cartography (NCGC) in Uzbekistan requested the assistance of a GIS professional via the GSDI Small Grant Program. NCGC is in the process of designing and implementing activities related to GIS strategic planning and capacity development. As part of this project, a number of land record management related papers/studies have been developed and the GISCorps volunteer's task will include reviewing these documents and making recommendations. Dr. Nancy Von Meyer, the vice president of Fairview Industries, has been recruited. Nancy is a GIS leader in the area of land record management and the recipient of URISA's Horwood Distinguished Service Award in 2007.

URISA Volunteer for GSDI Project in Russia

Professor William Huxhold, chair and professor of Urban Planning at the University of Wisconsin-Milwaukee, has been deployed to a GSDI Small Grant mission in Chelyabinsk, Russia. A 2011 URISA GIS Hall of Fame inductee, Prof Huxhold will be travelling to Chelyabinsk to present at a seminar at

the South Ural State University on November 1-2. His lectures will include several GIS related topics including but not limited to: the history and current status of GIS in the US (at all levels), the role of universities in the GIS industry, an overview of land record management, Spatial Data Infrastructure (SDI) and related standards, uses of remote sensing, and the state of various GIS datasets in the US.

For more information on these and other URISA GISCorps activities, visit the GISCorps website at: http://www.giscorps.org/index.php?option=com_content&task=view&id=96&Itemid=62

New Small Grants Funders Needed!

The financial situation in the USA has forced the US FGDC to withdraw its financial support from the Small Grants Program for 2013. The GSDI Association Board and Members are seeking replacement funding to help ensure that this most valuable contribution to the goals of the Association can continue from next year. Anyone who can help with future financial support, please contact the Association President or Executive Director.

To see the final reports and for more information on the Small Grants Program, visit our web site at http://www.gsdi.org/sic1. As always, we express the Association's grateful thanks for the support of the US Federal Geographic Data Committee (FGDC) and the URISA GISCorps for making the grants programme possible.

THE INTERNATIONAL GEOSPATIAL SOCIETY (IGS)

The International Geospatial Society (IGS) is the individual membership arm of the GSDI Association whose members have geospatial, SDI, GIS or related professional or specialist interests. The Society enhances communications globally among individuals that are actively involved in promoting, developing, or advancing spatial data infrastructure and related concepts. The IGS web site is at http://www.igeoss.org.

IGS Member Profiles

Unfortunately, no IGS Member provided profiles for including in this issue of the GSDI & IGS Newsletter. We remind our members, of both the Association and IGS, that this is their opportunity to let the rest of the membership – and indeed the geo world! – know of their activities and reasons why they are members of GSDI and/or IGS.

IGS Reminders

Subscriptions to GIM International

As a member benefit of IGS, you may receive a free subscription of GIM International. GIM International carries GSDI news, including IGS news, in a monthly column. If you want to stay up to date with this column and read up on other developments in Geomatics, please follow this link and subscribe if you are not already receiving a hard copy of the magazine: http://www.gim-international.com/GSDI.

Subscription to SDI Magazine

SDI Magazine is a specialist, free, online e-zine, focusing principally on SDI issues, as opposed to general geomatics topics. Subscription is free (visit www.sdimag.com) and GSDI Association and IGS Members are encouraged to subscribe. The magazine regularly carries news from both the Association and IGS, as well as updates on what is happening with regard to SDI developments around the globe.

Participation in GIKNet

IGS members are also reminded that information is uploaded in GIKnet in the Society Web Forum:

- Topics of general interest (English) http://www.giknet.org/forum/post.php?topic=41,
- Topics of general interest (Spanish), http://www.giknet.org/forum/post.php?topic=42,
- Task 5. Promote the work of IGS members as a network sharing information, knowledge and publications among IGS members" http://www.giknet.org/forum/post.php?topic=12

Members are invited to actively participate in the Society Web Forum, as a means of sharing news,

LinkedIn IGS Sub-Group

And if you have not already signed up for the IGS sub-group on LinkedIn (see December Newsletter), please do so ASAP! If you are already a member of the GSDI group, then you can request to join from the *Subgroups* page by clicking "Groups" at the top of your home page. Then click the parent group's name (GSDI). Under the "More" dropdown menu, select *Subgroups*. The click "Join this subgroup." You can view the status of your membership from the Your Groups page at:
http://www.linkedin.com/myGroups.

Joining IGS

Remember that individuals in low and very low income nations can apply to join the International Geospatial Society (IGS) by providing specific information of value to the global community in lieu of annual cash dues. The listing of low and very-low income nations may be found at http://www.gsdi.org/RankingTable.To join for free, simply add your professional profile to the growing interconnected network of geospatial specialists across the globe on the Geographic Information Knowledge Network (GIKNet) at http://giknet.org and then apply for membership in IGS at http://www.igeoss.org/join. To maintain your free membership, simply update your professional profile each year on or about December or January. You have the ability to view, edit, or delete your individual profile at any time.

Help us reach our goal of 1000 IGS Members by November 2013 – get your friends to join today!

IGS Members – submit your news, please, so that we can learn more about what our membership is doing! There are nearly 200 of you out there now, so please communicate with us. News can be sent by e-mail either to the IGS officers - President Mabel Álvarez or vice-President Lilia Patricia Aria, who can be contacted via the IGS web site - or directly to me, Roger Longhorn, Editor GSDI & IGS News at roger (at) alum.mit.edu.

ASSOCIATION & MEMBER NEWS

Videos Relating to Geospatial Data and SDI Developments and Benefits Globally

Various video presentations are available from a number of countries with a range of target audiences in mind, in most cases provided by member organisations of the GSDI Association.

From the Ministry of the Interior of **Chinese Taipei**, accessible from the Taiwan Geoportal One Stop (TGOS) portal, comes:

➢ *The Life Applications of SDI*. (3 min; language: English text - no spoken language, highly visual) http://tgos.nat.gov.tw/tgos/Web/MOI/video3.wmv
➢ *Open GeoSMS Enabled Services*. (3 min; language: English text - no spoken language, highly visual) http://tgos.nat.gov.tw/tgos/Web/MOI/video2.wmv
➢ *Step Toward High Interoperability*. (3 min; language: English text - no spoken language, highly visual) http://tgos.nat.gov.tw/tgos/Web/MOI/video1.wmv

From **Spain**, see the Spatial Data Infrastructure of Spain (www.idee.es) (6 min 24 sec; language: Spanish)
➢ http://www.youtube.com/watch?v=NNGBvprsV8A

The geoportal project Spatial Data Infrastructure of Spain (IDEE) was prepared by the IGN for the Geographic High Council which aims to integrate Internet through data, metadata, services and information of geographical produced in Spain, national, regional and local levels, providing all potential users the location, identification, selection and access to such resources, through this geoportal (www.idee.es). The video was produced by IGN.

From the **India** Geoportal, view or download two videos from:
➢ https://nsdiindia.gov.in/nsdi/nsdiportal/nsdiMovies.html

From the **Netherlands**, the Dutch Kadaster video is posted here:
➢ http://www.kadaster.nl/kadaster/wat_doen_we/film/film_UK.html

From **Africa**, see "*Grounds for Change*" - Find out how GIS helped drive Tim and Dr Michelle Schilling's ambitious project to bring Rwandan farmers into the competitive global coffee market.

➢ http://video.esri.com/watch/471/grounds-for-change

From the **USA** (but with global relevance), Penn State Public Broadcasting's *'Geospatial Revolution'* is presented in four Episodes - a brilliant and very thorough introduction to the benefits of geospatial data.

➢ http://geospatialrevolution.psu.edu/episode1/complete

- Episode 1 (13 mins 45 secs)
- Episode 2 (14 mins 42 secs)
- Episode 3 (15 mins 02 secs)
- Episode 4 (17 mins 45 secs)
- Trailer (5 mins 14 secs)

Check out the GSDI Association's *'Capacity Building Resources'* web site for some of these videos - and more to be added in the future – here: http://www.gsdi.org/sic3

ARTICLE OF THE MONTH

In this issue of GSDI & IGS Newsletter, we publish an article by GSDI's new President, Prof David Coleman, appears in the September issue of GIM International magazine – "*Map Database Updating in a Spatial Data Infrastructure*".

One of the more rewarding aspects of my day job is teaching undergraduate students. The challenges that my classmates and I faced when we graduated are in some ways fundamentally different than those faced by graduates nowadays. We were involved in *creating* the comprehensive control frameworks and digital topographic and cadastral databases in place today. My students, on the other hand, already work in data rich environments. With multiple spatial data infrastructures in place, today's graduates must make informed choices regarding which types of *existing* data they will employ in their solutions. Only then can they determine what they need to add through further data collection.

This is important project design challenge. Going right to field to collect new data may ensure you know the quality of your own data, but it is not always the most cost-effective solution.

Public and private mapping organizations today face the same challenge. With their respective spatial data infrastructures in place, a typical mapping program - be it, for example, in Natural Resources Canada, the USGS, the Ordnance Survey of Great Britain, TomTom or Google - can now make use of an imposing array of options for detecting and mapping changes. New options appear and old ones diminish as technologies advance.

Let's start organizing those options. At the highest level, the choice is between complete or incremental revision. Do you replace your base or only update it on a patch- or feature-basis in areas where changes occur? If opting for incremental updating, stay at a high-level for a minute longer. Think in terms of institutional options open in terms of change detection and map updating operations: in-house production, project- or program-based contractors, external custodians offering updates to particular data types, and even individual volunteer suppliers. Most programs today use some combination of these.

If considering in-house or contract production, a quick look at past *GIM International* articles offers a wealth of alternatives: soft copy photogrammetry, interpretation and on-screen digitizing of ortho-rectified high-resolution vertical imagery, interactive and automatic extraction of buildings and roads, and ground surveys

Even how we obtain and deal with the imagery is up for grabs. Rectified high-resolution vertical imagery may now be obtained from satellites, commercial mapping aircraft, and unmanned airborne vehicles. Georeferenced horizontal and oblique digital images may now be obtained from vehicle-based mobile mapping systems, handheld cameras, and even cell phones.

I'm curious. How many channels of input to their change detection and database updating does a typical mapping organization employ today? At what number does the whole process become too confusing or even unmanageable? Is there an

optimum number of channels to consider? We're just getting started. More to come on this!

Dr David Coleman is President of the GSDI Association, professor of geomatics engineering and Dean of the Faculty of Engineering at the University of New Brunswick, Canada.

THE GEOGRAPHIC INFORMATION KNOWLEDGE NETWORK (GIKNET)

The aim of the Geographic Information Knowledge Network (GIKNet) is to enhance communication and freely share knowledge among professionals in the global geographic information community. The GIKNet Community Registry permits individuals, government agencies, NGOs, companies and other institutions to record and publish details about themselves and submit relevant documents to the Spatial Documents Depot, which provides a search facility for locating information and documents submitted by GIKNetwork members. A comprehensive list of GI/SDI related discussion lists can be accessed from a single reference page. Access the GIKNetwork at this link: http://www.giknet.org/.

The main categories under which documents can be referenced in the GIKNetwork include: GI Science: Education & Training; GI Science: Research; and SDI/GIS: Practice and Applications. The network is promoted on the Association's e-mail lists and the LinkedIn GSDI Group. All members of the GSDI Association and IGS are encouraged to sign up for GIKNetwork and to submit documents relevant to any aspect of SDI development and deployment, globally.

PARTICIPATION IN GLOBAL SDI PROJECTS

➢ INSPIRE: pan-European regional SDI initiative. Various GSDI Association members remain involved in developing the harmonisation data specifications for the 34 data themes that comprise the interoperability goals of the European Union's INSPIRE Directive. All specifications are to be completed by mid-September and a new EC Regulation will be issued in 2013 requiring national compliance in the 27 EU Member States for these themes.

Various GSDI Member organisations, members of the GSDI Association Committees, Council and Board are involved in the many other global initiatives or programmes on an on-going basis:

➢ Eye on Earth – visit www.eyeonearth.org
➢ Group on Earth Observations (GEO) building the Global Earth Observation System of Systems (GEOSS) – see www.earthobservations.org/ag_partorg.shtml
➢ EuroGEOSS – GEOSS Project funded by the European Union – see www.eurogeoss.eu/default.aspx
➢ UNESCO IOC – Marine/Coastal Spatial Data Infrastructure development – visit www.iode.org.
➢ UNSDI – UN-GGIM (UN Global Geospatial Information Management) – visit ggim.un.org.
➢ UNSDI – UNGIWG (UN GI Working Group) – visit www.ungiwg.org

GSDI DISCUSSION FORUMS UPDATES

To see the latest news from the different e-mail forums maintained by the GSDI Committees (4) and the regional SDI Newsletters (5), visit the web site at http://www.gsdi.org/discussionlists, choose the forum of interest and select the 'Archives' option. All discussion lists are open to anyone who is interested in participating, and joining instructions are at the web site above.

For more information on any of these items, visit the **GSDI Association** web site at http://www.gsdi.org.

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