

SDI-AP

# Spatial Data Infrastructure Asia & the Pacific Newsletter

# February 2014

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Spatial Data Infrastructure – Asia and the Pacific (SDI-AP) is a free electronic newsletter from the <u>Global Spatial Data Infrastructure Association (GSDI)</u> which is available in both English and Chinese language versions. The newsletter is produced for people interested in Spatial Data Infrastructure, GIS, remote sensing and geospatial data issues in Asia and the Pacific. It aims to raise awareness and provide useful information to strengthen SDI initiatives and support synchronising these activities across the region. Support for the newsletter is also provided by the <u>Permanent Committee on Geographic Information for Asia and the Pacific (PCGIAP</u>), a regional forum to enhance cooperation in the development of a regional geographic information infrastructure. The newsletter is currently being produced for GSDI by the <u>Centre for Spatial Data Infrastructures and Land Administration</u> at the University of Melbourne.



To subscribe to SDI-AP use <u>this link</u>. Back issues of the newsletter are at the <u>GSDI website</u>. You can also sign up for <u>GSDI News List</u> to receive alerts of special news and announcements as well as notification of new issues of the SDI-AP newsletter. To subscribe and access archives of thematic or regional discussion lists <u>please visit</u>.

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# Message from the editors

Welcome to the February issue of the newsletter and the advent of the Lunar New Year.

If you have news or information related to SDI, GIS, RS or spatial data that you would like to share with the community (e.g. workshop announcements, publications, reports, websites of interest etc.), kindly <u>send us</u> the materials by the 25<sup>th</sup> of the each month for your contribution to be included in the next newsletter.

Malcolm Park and Serryn Eagleson (<u>Editors</u>), at the <u>Centre for Spatial Data Infrastructures and Land</u> <u>Administration</u>, The University of Melbourne.

# Contributions

Thank you to the following people and organisations for their contributions to this issue: Baek Wonkug for news feeds, Sean Lin and colleagues for the Chinese translation as well as Shivani Lal, *GIS Development*, *GeoSpatial World* and *Asia Surveying & Mapping* magazine for directly contributing to the newsletter.

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# **GSDI News**

## International Geospatial Society (IGS) Free Memberships

At its recent meeting, the GSDI Board of Directors passed a motion that allows individuals in low and very low income nations to join the International Geospatial Society (IGS) by providing specific information of value to the global community in lieu of annual cash dues. To join, simply add your professional profile to the growing interconnected network of geospatial specialists across the globe. Benefits of membership in IGS are listed at <a href="http://www.igeoss.org/benefits">http://www.igeoss.org/benefits</a>. For further information, contact <a href="http://www.igeoss.org/benefits">Harlan Onsrud</a>, Executive Director, GSDI Association.

### GSDI and IGS Global News, Volume 4 Number 1 for 2014 (January 2014) (PDF)

### **Outreach & Membership Committee**

Committee vice-Chair, Roger Longhorn has joined the International Hydrographic Organization (IHO) Marine SDI Working Group (MSDIWG) and attended the Marine SDI Open Forum meeting in Copenhagen (remotely!) and the following two-day workshop of the MSDIWG, hosted by the Danish Hydrographic Service. The MSDIWG, which has existed since 2009, is setting its new workplan for 2013-2014 and is interested in developing a stronger relationship with non-marine SDI development initiatives at national, regional and global levels. Longhorn will explore this with the GSDI Board and Executive Committee at the next opportunity. The Outreach & Membership Committee also manages the GSDI Group on LinkedIn, which has added seven new members in the past month, for a total of 229 members today. If you are not already a member of this group, please join today – and tell your friends! Visit <u>http://www.linkedin.com</u> to join, then find GSDI in the 'Groups' option, to join the group.

#### **Technical Committee**

Technical Committee Chair, Eric van Praag, Regional Coordinator, GeoSUR Program of the Latin American Development Bank (CAF), along with USGS, has nominated the GeoSUR Topographic Processing Service (TPS), built with ESRI's AG Server 10.1, for the AAG Stanley Brunn Award for Creativity in Geography. See more news later in this issue.

The Technical Committee is also responsible for updating of the GSDI SDI Cookbook, a wiki maintained at: <u>http://www.gsdidocs.org/GSDIWiki/index.php/Main\_Page</u>.

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

- <u>Digital Earth</u> (International Society for Digital Earth).
- Eye on Earth.
- Group on Earth Observations (GEO) / Global Earth Observation System of Systems (GEOSS).
- EuroGEOSS GEOSS Project funded by the European Union.
- INSPIRE Infrastructure for Spatial Information in the European Community.
- International Hydrographic Organisation Marine SDI Working Group.
- <u>UNESCO IOC</u> Marine/Coastal Spatial Data Infrastructure development.
- UNSD (Statistics Division) UN-GGIM (UN Global Geospatial Information Management).
- UNGIWG (UN GI Working Group).
- UNESCO IOC Marine/Coastal Spatial Data Infrastructure development.
- UNSDI UN-GGIM (UN Global Geospatial Information Management).
- UNSDI UNGIWG (UN GI Working Group).

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# **SDI News, Links, Papers, Presentations**

From Mark E. Reichardt, President & CEO, Open Geospatial Consortium (OGC) Call for Volunteers to advance UN-GGIM Core Standards Guide OGC Technical Committee and Business Value Committee members:

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Recently, I briefed the OGC Planning Committee on the activities of the UN Global Geospatial Information Management (UN-GGIM) including a request from the UN-GGIM Secretariat for key standards organizations – OGC, ISO and IHO - to advance a "core essential standards guide" for use by member nations to improve their understanding of the value of standards, and guide the adoption and application of open geospatial standards to meet their geospatial missions. The Planning Committee approved this request and asked for OGC staff to work with membership to stand up a team to development this document in conjunction with our partner standards organizations. ISO TC/211 has already formed a Task Force which will be dedicated to this task.

Our plan is to engage OGC, ISO and IHO members / staff over the next few weeks to scope the document, but the essence of this effort is to discuss the value and role of geospatial standards in the context of implementation and government mission accomplishment. The goal is an easy to understand, and relatively non-technical document focusing on communicating and educating key decision makers within member nations on topics such as:

- Role and value of open geospatial standards
- · Core geospatial standards and related best practices explained
- Implementation examples
- · References (national, regional and international cookbooks, SDI guides, etc.)

We are planning for an initial draft of this document to be available in late spring 2014, with ample time for a broad review and revision of a draft to be submitted for review and discussion at the UN-GGIM 4 meeting scheduled for the August 2014.

If you have an interested in supporting this activity, please reply to <u>UNStdsGuide@lists.opengeospatial.org</u> with your expression of interest. We anticipate that this activity will be conducted through regular virtual meetings with OGC staff facilitation of and involvement in the process. Please address any questions to me, Denise McKenzie or Carl Reed. The likely home for the effort in OGC's process will be a sub-committee of the Business Value Committee.

For background, I have uploaded the UN-GGIM Report – "Establishment and implementation of standards for the global geospatial community" to the OGC portal -- <u>https://portal.opengeospatial.org/files/?artifact\_id=56897</u>. I look forward to working with members on this important effort. Sincerely,Mark

#### Destination Spatial Matchmaker portal - a way for students, employers and educators to link up

Destination Spatial is a free service provided by the spatial information industry and is committed to providing future geospatial professionals with opportunities and resources to gain valuable professional experience. The Matchmaker portal helps to bring together secondary schools, colleges and universities, students and employer organisations in the spatial information industry for work placement opportunities including work experience, scholarships and cadetships, internships, full-time, part-time and casual employment. It is our goal to make the Matchmaker portal a gateway for geospatial students, whether school, college, university or postgraduate to gain valuable hands-on experience through practical work assignments with professional spatial employers.

The Matchmaker portal also provides spatial employers with a resource through which to source the assistance of highly qualified students specialised in various spatial fields.

# **Digital Earth report available**

The <u>D\_City: Digital Earth | Virtual Nations | Data Cities report</u> has been updated and printed, thanks to its sponsor, the Intergovernmental Group on Earth Observations (GEO).

GEO and the International Society for Digital Earth (ISDE) jointly announced the report's launch at the ISDE conference in Kuching, Malaysia, in August 2013. The 172-page document - a 'thorough snapshot' of current contributions to the G8/GEO-co-ordinated Global Earth Observation System of Systems (GEOSS) project - was, notably, edited by two Australians: Davina Jackson and Richard Simpson, two leaders of the ISDE's digital cities working party. They collaborated on D\_City (the 'D' being defined as 'dynamic digital data design for decent development') to help educate next-generation urban development professionals about effective ways of using geospatial technologies.

Since the ISDE Kuching release, two more print runs of the report have been circulated to leaders of key stakeholder organisations across the northern hemisphere.

The current update includes a 'Postscript' summary of latest advances supporting the GEO co-ordinated 'global Earth observations system of systems' (GEOSS) project.

The report has been online (originally as a preview for comment) since early 2012, and can be viewed at the D-City website.

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Editorial Board members for the D\_City report include GEO's Secretariat Director, Barbara Ryan and ISDE leaders Tim Foresman (associate editor), Massimo Craglia, John van Genderen, Michael Goodchild, Milan Konečný, and Abbas Rajabifard. Other ISDE leaders, including president John Richards, secretary general Guo Huadong, Alessandro Annoni and Peter Droege, provided comments for a special feature titled 'Debating the Data Deluge'.

#### Survey of Bangladesh ushers in an era of geospatial data management and digital napping

In an exclusive interview, Surveyor General Brig Gen Wahid replied to several questions covering entire activities, problems, potentials, contributions and future plans of the Survey of Bangladesh. The essence of the interview is presented in this article in The Guardian (BanglaDesh).

### **Geospatial Data Sharing Key to Economic Development**

The Group on Earth Observations met in Geneva, Switzerland in the week (Jan. 13-17, 2014), with an agenda to discuss the partnership among governments and international organizations to monitor and understand the Earth. Key to much of the discussion was the need to make data readily accessible for research and third-party entities that utilize the data to create economic value.

Restrictions to data usage, and complex rules for its use, create a bureacratic mess. With the federal government involved, and setting priorities, the nation stands to benefit, and with international sharing, so does the world.

#### Source: Asian Surveying & Mapping

Closely related: 'Misguided' nations lock up valuable geospatial data

Many governments, particularly those in low-income countries, are "shooting themselves in the foot" by failing to give research and development communities open access to their caches of geospatial data, experts have warned.

The potential of such data that incudes geographic positioning information, including satellite imagery, to aid fields such as disaster response, agriculture, conservation and city planning far outweighs any potential value from selling the information, they say.

Some examples of the beneficial sharing and opening up geospatial data were highlighted at a meeting in Geneva, Switzerland, of the Group on Earth Observations, a voluntary partnership of governments and international organizations.

But the misguided belief that government data represent a lucrative revenue stream is still stifling countries' development potential, says Paul Uhlir, the director of the board on research data and information at the US National Academy of Sciences.

Source: Scidev.net

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# Spotlight



This month's "Spotlight" feature is from **Hosna Tashakkori**, a PhD candidate at the Centre of Spatial Data Infrastructures and Land Administration (CSDILA) in the Department of Infrastructure Engineering, The University of Melbourne. Hosna's main research focus is on "Integrating Indoor and Outdoor Spatial Awareness for Disaster Management".



With the quick development of urbanisation and the increasing complexity of high rise buildings and underground structures, managing urban disasters has become more and more complicated. Each year over 83,000 firefighters and 12,000 civilians are injured and over \$11.8B is lost in property and structure damages only in United States. Although, a huge amount of money is being dedicated to increase the speed of sending fire trucks to the emergency location, dispatched incident commanders are not equipped with information of the incident location. In other words, first responders have minimal situational awareness prior to entering the incident location. Consequently, significant amount of time is spent to investigate and assess the situation before beginning the suppression action. Thus, entering buildings with insufficient knowledge of the building and its surrounding area results in complicated decision making and less effective emergency management.

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Efforts have been made to employ indoor positioning and navigation technologies to assist public in finding their way and evacuating complex structures in case of emergencies. Typically, these methods combine positioning technologies such as RFID, UWB, Wifi, Beacons, or QRCodes with path finding techniques to guide public towards exits in the event of indoor disasters. Some methods have even integrated semantic and structural information of buildings to the path finding process to make it more peculiar for indoor emergency response. However, as it is costly and infeasible to place positioning devices in each and every residential and commercial building, these solutions could not help in increasing public safety or decreasing response times in emergency situations.

Absence of structural awareness for first responders leads us to consider the development of an integrated data delivery system which combines indoor and outdoor spatial information. This system should enable building cognition and indoor spatial awareness for first responders. This means illustrating the most critical and essential information about the structure in the least time possible. Critical information could be anything from exit doors and stair cases to electric boards and gas pipes or other hazardous materials' locations. Integrating the structural information with outdoor spatial information will provide a holistic view of the disaster location and its surrounding. This holistic view will help first responders make wiser decisions. For instance, existence of a gas station or chemical hazard container in the disaster precinct highlights a higher risk of explosion and larger fire radiation distance and thus fire extinguishing would certainly require a broader action in this case.

First responders typically have a very short time between the dispatch time and arriving at the scene. Currently no additional information is known about the structure the incident happened and the environment around it. Thus, the officer can't plan before entering the site. Also, vague and limited information of the building conditions and the utilities hinder proper planning. Thus, this research aims to identify the necessary information required by emergency responders to react faster during building emergencies. Floor plans, building occupancy, building conditions, utilities' locations, hazardous materials, etc. are examples of such information. Also another important aspect of this research is to determine how this information should be visualized to be the most effective for planning purposes. Such integration of building information with the capabilities of the fire service will result in improved fire fighter safety and less emergency response time and finally reduction in property losses.

For this purpose, at CSDILA we have developed a preliminary prototype that integrates the indoor features and building information of the structures with the outdoor environment in 3D. As seen in the following figures, the prototype aims to present a holistic 3D view of the structures and their surrounding area. Also, the prototype can help in highlighting the main facilities in the



structure which their location is important to first responders. Furthermore, having the spatial indoor model, responders could be guided towards these facilities using path finding mechanisms. For more information about this project please contact: Hosna Tashakkori

The editors remind our subscribers and readers that we welcome contributions for the *Spotlight* feature.

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# GIS Tools, Software, Data

# Nepal Workshop Train Veterinarians on Mapping the Spread of Bird Flu

As many as 20 Nepali veterinarians, scientists and specialists recently participated in a five-day workshop on the use of Global Positioning Systems (GPS) and Geopgraphic Information Systems (GIS) to map the spread of diseases like avian influenza.

Source: Asian Surveying & Mapping

# Global map to predict giant earthquakes

A team of international researchers, led by Monash University's Associate Professor Wouter Schellart, have developed a new global map of subduction zones – which occur at the edge of tectonic plates – to predict which ones are capable of generating giant earthquakes and which ones are not.

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The new research, published in the journal *Physics of the Earth and Planetary Interiors*, comes nine years after the giant earthquake and tsunami in Sumatra in December 2004, which devastated the region and many other areas surrounding the Indian Ocean, and killed more than 200,000 people.

Since then two other giant earthquakes have occurred at subduction zones, one in Chile in February 2010 and one in Japan in March 2011, which both caused massive destruction, killed many thousands of people and resulted in billions of dollars of damage.

Most earthquakes occur at the boundaries between tectonic plates that cover the Earth's surface. The largest earthquakes on Earth only occur at subduction zones, plate boundaries where one plate sinks (subducts) below the other into the Earth's interior. So far, seismologists have recorded giant earthquakes for only a limited number of subduction zone segments. But accurate seismological records go back to only ~1900, and the recurrence time of giant earthquakes can be many hundreds of years.

"The main question is, are all subduction segments capable of generating giant earthquakes, or only some of them? And if only a limited number of them, then how can we identify these," Dr Schellart said.

Source: Monash University News

See also: Giant Earthquake Potential Plotted on a Map (Asian surveying & Mapping)

### A Nation is Built by Surveyors

A surveyor is an esteemed professional. A quantity surveyor manages all costs relating to building and civil engineering projects. He prepares the feasibility or cost study to ensure the viability of the project. He works closely with the architects, contractors, suppliers and property developers, among others. And the job pays well too.

The land surveyor, officially known as geomatic land surveyor, is involved in matters of boundary marking, hydraulic and engineering surveying, and even mapping surveys. He is also an expert in subdivision and partitioning of lands.

Source: Asian Surveying & Mapping and New Straits Times

# New NENA standards document for GIS data: open for public review and comment

National Emergency Number Association (NENA) Standards for the Provisioning and Maintenance of GIS data to ECRF/LVF, NENA-STA-005 (DRAFT) has been <u>posted to the NENA collaboration website</u> (PDF) and is available for Public Review and Comment starting December 20, 2013, and ends on January 16, 2014, at 5PM ET. All comments shall be submitted by going to this <u>link</u> and then selecting "add a comment" just above the title "Document Details." Please complete all requested data and "Save" OR if submitting multiple comments, select "Save and Add Another". Any questions or concerns with submitting your comments please contact <u>the NENA Committee Resource Manager</u>.

# **Executive Overview**

This document defines operational processes and procedures necessary to support the i3 Emergency Call Routing Function (ECRF) and Location Validation Function (LVF). Additionally, this document identifies ECRF/LVF performance and implementation considerations for 9-1-1 Authorities' consideration. The roles and responsibilities of 9-1-1 Authorities vary depending on jurisdictional hierarchy, resource availability, capabilities, service arrangements, and regulations and statutes. As such, 9-1-1 Authorities are expected to work with ECRF/LVF operators to further clarify and/or identify additional required services prior to development and implementation of ECRF and LVF.

Although this document contains references to 9-1-1 Authorities' Geographic Information System (GIS), Public Safety Answering Point (PSAP) equipment, access and call network providers Location Information Servers (LIS), and other core functions of the ESInet, their functionality and operations are out of scope for this document. NENA 08-003, Detailed Functional and Interface Specification for the NENA i3 Solution – Stage 3, contains definition of data structures and detailed functional and interface standards that are referenced in this document.

# Survey of India Takes on World's Biggest Survey

Survey of India has taken up a special project on mapping the country using modernised technique at an estimate of Rs. 1,800 crore. This is considered the 'biggest survey' to be taken up so far across the world, said Swarna Subba Rao, Surveyor General of India, Survey of India (Sol).

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The current project on mapping would be on the scale 1:10,000 which meant that minute details right from platform, roads, and details of transformers would be available.

Sol had taken up mapping on 6,000-km coastal boundary with .5m contour interval which meant concrete data on the coast.



### Source: Asian Surveying & Mapping and The Hindu

#### Singapore: Developing 3D National Topographic Model

The Singapore Land Authority (SLA) is leading a whole-of-government initiative to develop and maintain a 3D National Topographic Model to facilitate the efficient exchange and use of topographic information among agencies.

"Today, topographic plans are produced and kept by separate agencies to serve localised development needs (e.g. for a particular development area). Given the increasing need for accurate 3D information on the as-built environment, there is a need for SLA to take the lead to capture and produce much-needed 3D data for Agencies' critical needs such as flood risk modelling, flight path planning, environment and coastal protection, and many more," says Ng Siau Yong, Director of the Geospatial Division at SLA.

He told FutureGov that this initiative will involve data acquisition in the air and on-ground. SLA will be creating a 3D topographic database allowing efficient maintenance so as to keep the 3D data constantly up-to-date.

A key dataset produced from this project will be the National Digital Elevation Model (DEM). Already, SLA has received many requests from Agencies on this for their planning, operational and developmental needs. Source: FutureGov

#### **Mapping Pacific maritime boundaries**

This year Kiribati finalised maritime boundaries with the United States of America. The successful outcome, in September, was the result of the work that the Pacific Island country, along with 12 others, undertook at the Maritime Boundaries and Ocean Governance working sessions at the University of Sydney.

The most recent working session at the University ended on 6 December.

"Technical and legal personnel from these Pacific Island countries have been coming to the University of Sydney for the last six years to secure rights to their marine spaces," said Professor Elaine Baker from the University's School of Geosciences, which hosts the meetings.

"Global interest in marine resources, including fisheries and seabed minerals, and the threat of climate change and sea level rise, has spurred Pacific Island countries to settle their maritime boundaries."

The Cook Islands, for example, has valuable deposits of seabed minerals, many of which are essential to new technologies such as renewable energy and communications equipment. In order for the Cook Islands to capitalise on these resources, they require sound governance frameworks and jurisdictional boundaries.

"Settling maritime boundaries in other areas of the world is often highly contentious, but a striking feature of this region is the cooperative approach," said Professor Baker. "This has resulted in unprecedented progress in settling the boundaries between countries and, at this time, the Pacific leads the world."

Source: SECRETARIAT OF THE PACIFIC COMMUNITY (SOPAC) news release

## Geoscience Australia contributes new data and resources to data.gov.au

The <u>data.gov.au</u> team are very pleased to announce today that we have added 2,503 new datasets in collaboration with Geoscience Australia and the Department of Communications. The data is hosted by Geoscience Australia and includes current and historical data ranging from full web services to old scientific manuals.

# PRESS ANNOUNCEMENT FOR RELEASE ON 30<sup>th</sup> JANUARY 2014 - <u>Contact</u>.

## The Open Geospatial Consortium and the Small Cell Forum Co-Operate to Develop Support for Indoor Location Based Services

**The Small Cell Forum**, the independent industry and operator association that supports small cell deployment worldwide, and the**Open Geospatial Consortium** (OGC), a standards consortium working to make spatial information an integral part of the global information infrastructure, today announced that the two bodies have signed a liaison agreement with an initial focus on developing support for location based services within mobile networks based on small cells. Small cells can be used to support location services in a range of indoor locations including: navigation in airports, retail unit location in shopping centers and asset location in hospitals and warehouses.

As part of the agreement the Small Cell Forum and the OGC will cooperatively develop a joint document that indicates to operators which OGC standards are relevant for small cell based location based services within the context of mobile networks and will also exchange technical and marketing information about the use of location based services for small cells and small cell based services.

"The use of small cells in mobile networks around the globe can bring benefits to operators, their customers and society at large," said George Percivall, OGC's Chief Engineer. "Information about the locations of cells, their coverage areas, proximity to barriers, etc. is of critical importance in maximizing the value received by all these



stakeholders. We look forward to working with the Small Cell Forum to help enable the flow of such location information."

"Accurate indoor location information has become a critical component to the mobile user experience," said Andy Germano, Vice President Americas at the Small Cell Forum. "By working together with the OGC the Small Cell Forum can help ensure that mobile operators can provide high quality location information both indoors and out. We look forward to working together to help enable compelling user experiences using location and small cells."

#### About the OGC:

The <u>OGC</u> is an international consortium of more than 475 companies, government agencies, research organizations, and universities participating in a consensus process to develop publicly available geospatial standards. OGC standards support interoperable solutions that "geo-enable" the Web, wireless and location-based services and mainstream IT. OGC standards empower technology developers to make geospatial information and services accessible and useful with any application that needs to be spatially enabled.

#### About the Small Cell Forum (SCF):

The <u>Small Cell Forum</u>, supports the wide-scale adoption of small cells. Small cells are low-power wireless access points that operate in licensed spectrum, are operator-managed and feature edge-based intelligence. They provide improved cellular coverage, capacity and applications for homes and enterprises as well as metropolitan and rural public spaces. They include technologies variously described as femtocells, picocells, microcells and metrocells. The Forum has in excess of 150 members including 68 operators representing more than 3 billion mobile subscribers – 46 per cent of the global total – as well as telecoms hardware and software vendors, content providers and innovative start-ups.

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# News from abroad

"This section has been included to highlight some of the developments happening outside the region which demonstrate SDI in action.



# Webmap – The toll of the anti-vaccination movement

This interesting webmap tip comes via the LA Times... The toll of the anti-vaccination movement. From the LA Times – Aaron Carroll today offers a graphic depiction of the toll of the anti-vaccination movement. It comes from a Council on Foreign Relations interactive map of "vaccine-preventable outbreaks" worldwide 2008-2014. A couple of manifestations stand out. One is the prevalence of measles in Europe — especially Britain — and the U.S. Measles is endemic in the underdeveloped world because of the unavailability of the MMR (measles, mumps and rubella) vaccine. But in the developed world it's an artifact of the anti-vaccination movement, which has associated the vaccine with autism.

Source: LA Times and GISuser blog

# South Africa: Geomatics Profession Act

The Geomatics Profession Act which aims to promote a high standard of professional conduct for geomatics practitioners was signed this week by President Jacob Zuma.

The act provides for the transformation of the geomatics profession and the establishment of the South African Geomatics Council as a juristic person and its facilitation of accessibility to the geomatics profession. The geomatics practitioner collects and assesses geographic information and applies that information in the efficient administration of land, sea and structures.

The act also provides for:

- Different categories of registered persons and branches in the geomatics profession.
- The identification of areas of work to be performed by the different categories of registered persons.
- The recognition of certain voluntary associations by the council.
- The measures designed to protect the public from unethical geomatics practices.
- Measures in order to maintain a high standard of professional conduct and integrity in the profession.
- The establishment of disciplinary mechanisms and an appeal board.

The Geomatics Profession Act repeals the Professional and Technical Surveyors' Act (1984).

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The explanatory summary of the bill was published by the Department of Rural Development and Land Reform in Gazette 35801 on 22 October 2012 and the bill was tabled in parliament on 7 March 2013. The bill was passed in the National Assembly on 20 June 2013, was assented to by the President on 9 December 2013 and published in Gazette 37142 on 11 December 2013. See <u>Geomatics Profession Act</u>.

## The Advisory Board of the "Geo for All" initiative.

- \* Professor Georg Gartner (ICA President & co-chair)
- \* Jeff McKenna (OSGeo President & co-chair)
- \* Professor Josef Strobl
- \* Professor Marguerite Madden
- \* Professor Mike Jackson
- \* Sven Schade
- \* Gavin Fleming
- \* Sergio Acosta y Lara
- \* Dr Chris Pettit
- \* Professor Venkatesh Raghavan
- \* Geoff Zeiss
- \* Jeroen Ticheler
- \* Phillip Davis
- \* Arnulf Christl
- \* Professor Maria Brovelli
- \* Dr Rafael Moreno

The ICA-OSGeo Lab network is a joint initiative of the Open Source Geospatial Foundation (OSGeo) and the International Cartographic Association (ICA). The ICA and OSGeo Presidents will be the co-chairs and permanent members of the Advisory Board. Others will have 3 year term starting date of the Advisory Board being constituted (1 Dec 2013). The Advisory Board has brought together excellent range of expertise (academia, government, industry) and geographical distribution (we have nearly all continents covered). Also it brought together members from other key communities ISPRS, AGILE, INSPIRE, UNIGIS etc. which will make sure is it a fully inclusive global initiative. The Advisory Board will meet once every six months by telemeeting and AB members will keep an eye on the developments and provide strategic advice to the initiative through various forums.

While there has been tremendous growth in geospatial technology over the last few decades, the number of universities offering courses in geospatial science has not kept pace. Free and open geographic information (GI) software helps make geospatial education available to students from economically poor backgrounds worldwide (removing the need for high cost proprietary GI software). Our key aim is to make it possible for students in developing and poor countries to be also able to get geospatial education. This initiative will bring more opportunities for geospatial education worldwide. Over 50 Open Source Geospatial Labs have already been established in universities around the world as part of this initiative in just two year's time, and we will be establishing over 100 research labs worldwide by September 2014.

We will have over 500 labs established worldwide in the next five years making us the biggest geospatial education and research network in the planet and we now have a good team of experts to guide us for the future. Welcome to all members of the Advisory Board and we are looking forward for their advice and ideas for expanding this education initiative globally.

We thank all of you for your strong support for this education initiative and it is very happy for us that our initiative has now grown rapidly from very humble beginnings and is helping to widen the benefits of geospatial education opportunities to thousands of students worldwide.

# Read World News on the Map via the Esri News story map

The ultimate news map! This fabulous Esri Storymap lets you read 86 different English language newspapers around the globe. You've seen the cool and informative Esri news maps no doubt. Well, this one is really fun, clever, and quite informative. Browse and wander around the map to discover major newspapers. Hover over a red city icon and click to reveal a nicely formatted browser window appear displaying the city newspaper for you to enjoy. There's dozens of papers available from Honolulu, to Anchorage and New York and many places in between – great stuff Esri! Oh, and you aren't limited to the USA as you can enjoy and read papers all around Europe, South America and all around the Globe.

Source: GISuser blog and ESRI



# Articles

Article under review, International Journal of Spatial Data Infrastructures Research Authors: Aoife Corcoran, Zorica Nedović-Budić, <u>INSPIRE in the Trenches</u> Abstract

The availability of, access to and sharing of spatial data is of increasing importance for urban areas as they face the transition towards urban resilience and sustainability in a response to challenging local and global issues. Coinciding with this, the European Commission introduced the INSPIRE Directive in 2007 which aims to improve the spatial data sharing process and interoperability of environmental spatial data across Europe. Yet how effective the INSPIRE Directive has been on an urban level remains largely unexplored. In order to examine how well INSPIRE's urban stakeholders are being impacted by the Directive this paper evaluates the data sharing process of a European Framework Programme 7 project against the INSPIRE Implementing Rules (IR). The FP7 project presents an interesting case study as it undertook a data sharing process whereby seven different data layers from across ten different European cities all within the INSPIRE jurisdiction were shared. We review the level of application of the urban data layers to the IR and the impact the local and regional considerations of the rules have on efforts to achieve technical and non-technical interoperability of spatial data on an urban level across Europe

Keywords: INSPIRE, interoperability, urban data, SDI

### India: NSDI status and the road ahead, Coordinates Magazine, December 2013

During the XII Plan (2012-2017), NSDI is being upscaled to develop the National Geographical Information System (NGIS) by setting up of a National Data Registry, a National Geo-spatial Platform, and development of products/ application services for a select group of end users.

Over the years, a robust network of shareholders has been installed and sustained for provision of various webbased services in an interoperable form over the web. Utility of Geo Portals, Standard Specifications, Spatial Data Reengineering, Interoperapability etc. has been demonstrated with the involvement of the Advanced Laboratory on Geo- Information Science & Engineering at IIT Bombay and the network of R & D Institutions of Natural Resources Data Management System (NRDMS). These are being adopted and used by the NSDI Shareholders. Required capacities are being built in various organisations and agencies at the National and State levels to operationalise Spatial Data Nodes for provision of web-based Data Services. There is a greater degree of awareness about NSDI Web Services amongst the Stakeholders and End Users. However, the gap exists between end user's access to Data Services and their effective utilisation in decision support. NSDI is thus currently migrating itself from the present 'Data Space' to 'Product Space' to meet the aspirations of the NSDI Shareholders and the Stakeholders.

This paper was presented at NSDI 13, IIT Bombay during November 29-30, 2013.

Why a journalist should use GIS – Views from the leading experts by Richard Bedford

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# Books and Journals (including Videos and Web publications)

# CALL for PAPERS: Geospatial Semantic Array Programming

Earthzine, an IEEE-sponsored online scientific journal, is soliciting articles of 800-3,000 words for its second quarter theme of 2014 on **Geospatial Semantic Array Programming** (GeoSemAP). We seek contributions from all regions of the globe, addressing environmental transdisciplinary research in which a concise integration of array-based semantics and array programming, geospatial tools and a modular composition of data-transformation models are exploited for geospatial problems within the paradigm of Semantic Array Programming. This theme specifically focuses on wide-scale transdisciplinary modelling for environment (WSTMe) as a scientific challenge with an increasingly important role in allowing strategic policy-making to be effectively discussed and programmed with the support of robust science. See the call for papers OR download it in PDF.



# Call for papers: Special Issue on Sensing Technologies for Intelligent Urban Infrastructures,

## IEEE Sensors Journal

Urbanization growing globally has brought in a need to rethink how future cities and infrastructures will look like. A future urban infrastructure should be able to cater for diverse socio-economic needs relating to aspects such as energy use, environment and natural resources, health and well-being, safety and transportation. In particular, sensing technologies will play a critical role in realizing smart and sustainable urban infrastructures, for instance for monitoring and intelligent decision-making, sensor-driven actuation of urban control processes, as well as driving big urban sensor data solutions.

Potential topics for contributions to this special issue may include (but are not limited to):

- innovative sensor technologies
- sensor processing techniques
- sensor architectures and interfaces
- connected sensors
- sensor-driven analytics and services
- Big Sensor Data solutions
- These topics should be addressed in relation to intelligent urban infrastructure domains such as:

• Energy monitoring and management: Sensing solutions in smart grids for reliable and efficient power distribution, monitoring and management of in-building and outdoor facilities;

• Environment and natural resource management: Sensing environmental parameters for advanced monitoring of air and water quality, and disease spreads;

• Safety: Sensing technologies for emergency response, crowd-management, outdoor infrastructure lighting for better illumination and safety;

• Transportation: Sensors for traffic flows and optimized traffic management, sensing technologies for connected vehicles for sustainable transportation solutions.

### **Deadlines** (tentative)

Manuscript submission: March 1, 2014

Manuscript decision upon peer-review: May 15, 2014

Final decision upon peer-review of revised manuscript: August 1, 2014

Final manuscript due: September 1, 2014

Tentative publication: December, 2014

#### **Guest Editors**

Ashish Pandharipande, Philips Research, The Netherlands

Francesco Calabrese, IBM Research, Ireland

Hock Beng Lim, Nanyang Technological University, Singapore

Ram Rajagopal, Stanford University, USA

**Note to Prospective Authors:** The submissions should contain a clear discussion on how the work presented would contribute towards smart urban infrastructures (absence of which would lead to rejection). All papers shall undergo the standard IEEE Sensors Journal peer review process. Manuscripts must be submitted on-line, via the <u>portal</u>. When submitting, please indicate in the "Manuscript Type" roll down menu that the paper is intended for the "Sensing Technologies for Intelligent Urban Infrastructures" Special Issue, and also by <u>email to Ms. Alison Larkin</u>. Authors should suggest names of qualified reviewers for their manuscript in the space provided for these recommendations in Manuscript Central. For manuscript preparation and submission, please follow the guidelines in the Information for Authors at the IEEE Sensors Journal web page.

# CALL for PAPERS: Special Issue "NeoGeography and WikiPlanning 2014"

A special issue of Future Internet

#### Deadline for manuscript submissions: 15 March 2014

The special issue will examine the creation, diffusion, and use, through the web, of geographic information and focuses particularly on the Web 2.0 phenomenon, so as to understand how the interaction between producers and non-expert users can modify the traditional fundamentals of map making, which is one of the most ancient forms of human expression. Other than IT and spatial experts (or spatially aware professionals or academics), the issue's topic should be attractive for people not directly dealing with such 2.0 spatial issues, but who are active as scholars in spatially related disciplines (*i.e.*, geography, geoscientists, spatial economists, spatial planners, *etc.*). These scholars can contribute with a vision on the role of the "traditional" mainstream subject and their relationship with such new instruments and tools.

The special issue represents an opportunity for provocative debate and reflection on the roles of both traditional disciplines (*e.g.*, geography, economics, planning, *etc.*) and of new ones (*e.g.*, GI sciences, image



processing, *etc.*) in comparison with the bottom-up blossoming of uncontrolled, nearly anarchical geographical expressions.

## CALL for PAPERS: <u>Earth Science Informatics</u>, <u>Special Issue – Semantic e-Science - Call for papers</u> Full papers due: March 15, 2014

As the volume, complexity, and heterogeneity of data resources grow, scientists increasingly need new capabilities that rely on "semantic" approaches (e.g., in the form of ontologies and vocabularies — machine encodings of terms, concepts, and relations among them) to help understand the meaning of data. The field of semantic e-Science fosters the growth and development of data-intensive scientific applications based on semantic methodologies and technologies, as well as related knowledge-based approaches. In recent years, semantic methodologies and technologies have been gaining momentum in e-Science areas such as solar-terrestrial physics, geology, ecology, oceanography, meteorology, and life sciences, to name a few. The developers of e-Science infrastructures are increasingly in need of semantic-based methodologies, tools, and middleware. This infrastructure will in turn facilitate scientific knowledge modeling, logic-based hypothesis checking, semantic data integration, application composition, integrated knowledge discovery and data analysis for different scientific domains, and building systems for use by scientists, students, and, increasingly, non-experts.

This special issue invites research papers that demonstrate how semantic methodologies and technologies are currently meeting scientific or engineering goals in Earth and space science domains. Papers should highlight the innovative designs, methods or applications associated with the semantic

technologies. Review papers presenting state-of-the-art knowledge about a subject in semantic e-Science and methodology and software papers about a new algorithm or software package are also welcome. Authors should prepare their papers following the instructions for authors provided by Earth Science Informatics. Papers should be submitted on-line indicating the special issue "Semantic e- Science". Authors may contact a guest editor about their intention to submit, including a short description of the intended submission.

Earth Science Informatics is a widely indexed and circulated international journal

#### CALL for PAPERS: <u>Special Issue "Earth Observation for Water Resource Management in Africa"</u> Remote Sensing Journal Deadline for manuscript submissions: March 31, 2014

The concept of Integrated Water Resource Management (IWRM) is seen as an opportunity to help manage water variability and the wide spread water scarcity in Africa. One key component missing from IWRM in Africa is the limited knowledge of the available extent and quality of water resources at basin level. Earth Observation (EO) technology can help fill this information gap by assessing and monitoring water resources at adequate temporal and spatial scales. The goal of this Special Issue is to understand and demonstrate the contribution which satellite observations, consistent over space and time, can bring to improve water resource management in Africa. Possible EO products and applications range from catchment characterization, water quality monitoring, soil moisture assessment, water extent and level monitoring, irrigation services, urban and agricultural water demand modeling, evapotranspiration estimation, ground water management, to hydrological modeling and flood mapping/forecasting. Some of these EO applications have already been developed by African scientists within the 10 year lifetime of the TIGER initiative: Looking after Water in Africa, whose contributions are intended to be the starting point of this Special Issue and is only one example of the wide range of activities in the field. Contributions from the entire African and international scientific community dealing with the challenges of water resource management in Africa are the target of the special issue. In the years to come, an ever increasing number of international EO missions, such as the Landsat, ALOS, CBERS and RESOURCESAT mission suites, the family of Sentinel missions and the SMAP mission, will provide an unprecedented capacity to observe and monitor the different components of the water cycle. This Special Issue aims also at reviewing the latest developments in terms of new missions as well as related EO products and techniques that will be available in the near future to face some of the major challenges for IWRM in Africa.

# Digital Earth report available

The <u>D City: Digital Earth | Virtual Nations | Data Cities report</u> has been updated and printed, thanks to its sponsor, the Intergovernmental Group on Earth Observations (GEO).

GEO and the International Society for Digital Earth (ISDE) jointly announced the report's launch at the ISDE conference in Kuching, Malaysia, in August 2013. The 172-page document - a 'thorough snapshot' of current contributions to the G8/GEO-co-ordinated Global Earth Observation System of Systems (GEOSS) project - was, notably, edited by two Australians: Davina Jackson and Richard Simpson, two leaders of the ISDE's digital

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cities working party. They collaborated on D\_City (the 'D' being defined as 'dynamic digital data design for decent development') to help educate next-generation urban development professionals about effective ways of using geospatial technologies.

Since the ISDE Kuching release, two more print runs of the report have been circulated to leaders of key stakeholder organisations across the northern hemisphere.

The current update includes a 'Postscript' summary of latest advances supporting the GEO co-ordinated 'global Earth observations system of systems' (GEOSS) project.

The report has been online (originally as a preview for comment) since early 2012, and can be viewed at the D-City website.

Editorial Board members for the D\_City report include GEO's Secretariat Director, Barbara Ryan and ISDE leaders Tim Foresman (associate editor), Massimo Craglia, John van Genderen, Michael Goodchild, Milan Konečný, and Abbas Rajabifard. Other ISDE leaders, including president John Richards, secretary general Guo Huadong, Alessandro Annoni and Peter Droege, provided comments for a special feature titled 'Debating the Data Deluge'.

# GSDI and IGS Global News, Volume 4 Number 1 for 2014 (January 2014) (PDF)

MMA Location Terminology Guide

World Disasters Report 2013: Focus on technology and the future of humanitarian action

# 2013 Tasmanian Bushfires Inquiry Report

# Disaster Risk Management in Asia and the Pacific Issues Paper (April 2013)

# D\_City: New report on modelling Earth systems for climate and environmental solutions

The world's first comprehensive 'snapshot' report on how science and technology leaders are supporting the 'global Earth observation system of systems' (GEOSS) project. Titled *D\_City: Digital Earth | Virtual Nations | Data Cities*, the report has been produced to explain to urban development professionals the emerging 'Google era' of satellite Earth observations and geospatial science and technologies for modelling climate-related environmental solutions.

Co-edited by urbanists and scientists leading the digital cities working party of the International Society for Digital Earth, the book's first printings have been sponsored by the Group on Earth Observations secretariat in Geneva, led by Ms Barbara J. Ryan.

GEO is supporting D\_City's proposed 'network concept diagram' for the GEOSS project – which suggests a new stream of 'Virtual Nations' projects and increasing integrations of computer modelling the stocks and flows of nature, buildings and cities.

The GEO news article is at <u>earthobservations.org</u>. The report (with downloadable PDF) is available from <u>dcitynetwork.net/manifesto</u>. Printed copies can be ordered from DCity at <u>info@dcitynetwork.net</u>. The media release is at <u>http://dcitynetwork.net/wp-content/uploads/2013/09/GEOISDE-Data-Cities-press-release.pdf</u>. A blogpost with links to press coverage of the report is at <u>http://dcitynetwork.net/2013/09/geo-sponsors-first-printings-of-d\_city-report/</u>

#### NewGeography website

# Mapping London blog

# LandScan: a news update from Land Information New Zealand, Issue 66 (September 2013)

In this issue...

- International acclaim for the LINZ Data Service
- Property rights reputation remains high
- LINZ establishes Crown Land Centre of Expertise
- Location-based information to boost Canterbury recovery
- First new nautical paper chart produced in-house
- LINZ takes learners on a geospatial adventure
- Stakeholder survey thanks for your feedback



#### Borderlines blog from the New York Times

Countries are defined by the lines that divide them. But how are those lines decided — and why are some of them so strange? Borderlines explores the stories behind the global map, one line at a time. by Frank Jacobs

Frank Jacobs is a London-based author and blogger. He writes about cartography, but only the interesting bits. His other blog is <u>Strange Maps</u>

#### Blog of Ragnvald Larsen, geographer

Geographer working with maps at the Norwegian Directorate for Nature Management. Part of his job is to contribute to development aid projects.

Steve Goldman's Map Fodder website

#### Location matters: spatial standards for the Internet of Things

<u>ITU</u>-T's latest Technology Watch report introduces readers to location (spatial) standards and their role in enabling the Internet of Things, describing how communications infrastructure has increased people's associations with the natural and built environment as well as how this can be leveraged to improve governance and service delivery by revealing new insights into how we interact with one another and the services and infrastructures that surround us.

Authored by staff and members of the Open Geospatial Consortium (OGC), with support from ITU-T, the report is titled "Location matters: Spatial standards for the Internet of Things" and can be <u>downloaded</u> free of charge.



The report discusses the technologies and standards emerging in support of location-based services (LBS), analyzing shortfalls in interoperability and highlighting where global standardization can tap the full potential of these fast-maturing technologies and the valuable data they return.

Spatial standards' role in the marketplace is critiqued with a view to uncovering clear trends or market drivers, and readers will discover that location matters in a wide range of sectors, with examples being made of emergency and disaster management and response; smart infrastructure; smart water management; and, of course, transportation.

The report goes on to describe the spatial standards landscape, looking at the activities of the involved standardization bodies and concluding with an analysis of the greatest obstacles to be overcome in the spatial standards arena.

#### **David Rumsay Map Collection**

International Society for Digital Earth - August, 2012 Newsletter

Thoughts on the Geospatial industry, Open Standards and Open Source Cameron Shorter's blog

<u>New Zealand - SDI Cookbook Chapter 6 – Government and Industry, moving forward.</u> <u>Carnival Of The Geospatialists #3 - Musings and Down-Right Cool Things Shared by the Geo Faithful</u>

Open Planet 5, the magazine published for the International gvSIG Conference is now available in electronic format

SDI Magazine

Technology & More (July 2013)

Mother Pelican: A Journal of Sustainable Human Development The November 2013 issue has been published

LiDAR News, Vol 3, No 16 (Vol 3, No 19, 18 December, 2013) (Vol 3, No 20; 19 December, 2013)

LiDAR News magazine (December, Vol 3, No 6, 2013)

Think Quarterly - Google's new on-line magazine

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<u>Coordinates</u> monthly magazine - **PDF** (February 2013)

SERVIR-Africa community news

**GISuser - GIS and Geospatial Technology News** 

National Geographic website

The Atlantic Cities website including Maps

Professional Surveyor magazine

The American Surveyor newsletter (October 30), <u>The American Surveyor</u> newsletter (November 13) <u>The American Surveyor</u> newsletter (November 27)

The American Surveyor Vol.10 No.9 (September 2013)

My Co-ordinates e-zine – October 2013 issue (PDF)

**UN-SPIDER Newsletter** June 2013

**UN SPIDER Updates** November 2013

Thematic Mapping blog Terrain mapping with Mapnik

**Richard Bedford blog: Mapping the News** 

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# Just for Fun!

# A Tie That Can Help You Navigate the Subway

Japanese tie-maker ARA has come up with a clever way to navigate the subway like a champ. Their new ties include a map of the entire Tokyo subway system on the back -- no fumbling on smartphones required. The ties are 100 percent silk and currently sell for 6,090 yen (about \$58) online. Another version for Osaka and Kyoto is also available. Source: The Atlantic "Cities"



# Facebook Is Using Your Profile to Track Global Urban Migration Trends

Facebook possesses a startlingly massive trove of data on global migration patterns. It's hidden, innocuously enough, amid two simple biographical details that many people post on their profile pages: Where you live, and where you're from.

Between those two data points – spread across the millions of its 1 billion users who volunteer this information – Facebook can paint a picture of where large population shifts take place, which cities seem to attract the most people, and what kinds of communities are losing them.

Source: The Atlantic "Cities": Maps

#### Ultra-thin fault caused gravity-distorting Japan quake

An ultra-thin fault zone packed with slippery clay was behind the massive seismic slip during Japan's devastating Tohoku earthquake of 2011. The quake was so great that it permanently changed the region's gravitational field, and was "heard" from space.



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. . .

February 2014, Vol. 11, No. 2



The Tohoku slip was so big that the infrasound waves generated by the quake propagated more than 200 kilometres through the atmosphere. That disturbed the orbit of the European Space Agency's GOCE satellite (Geophysical Research Letters).

GOCE measures small variations in Earth's gravity field, which changes with the shape of the landscape and density of the crust. Yesterday, researchers at the German Geodetic Research Institute in Munich and Delft University of Technology in the Netherlands released more GOCE data showing that the guake has caused subtle changes in the local gravity field.

Source: New Scientist, 14 December, 2013

## 2,500 American Breweries on one Giant Map

Pop Chart Lab has put together a wall map of over 2,500 breweries across the United States. There are plenty of pockets of intense brewing activity-which are exactly where you'd expect them to bebut what's more fascinating are the lone outposts of production: Big Bend in southwestern Texas, Souris River in northern North Dakota, Ruby Mountain in northeastern Nevada. Anyone tried any of these?

The actual print is five feet wide, so if you actually want to see the names and locations of the breweries you can click here to view a much larger version

Source: GISuser blog

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# **Training Opportunities**

## Professional Development Workshop: Data Collection, Statistics, Socio-economics, Population **Genetics, GIS and Professional Skills**

Integrating biological, socioeconomic data and modeling for conservation planning in Central Africa 8-14 July 2014, Yaoundé, Cameroon

Applications are welcome from early-career scientists and graduate students interested in biodiversity conservation by 1 Feb 2014.

Professional development workshops are a keystone educational project activity, which bring together earlycareer scientists and graduate students from Cameroon, Gabon, Equatorial Guinea, Europe and the U.S. The 2014 workshop will provide cutting-edge training in:

- · Collection and analysis of genetic data
- Collection of macro- and micro- socioeconomic data
- Geographic Information Systems (GIS)
- Statistical data analysis
- Professional skills development via a COACh workshop following the main program

Computers and software will be provided for use at the workshop. Travel and subsistence will be covered for U.S. and African participants. To apply send your C.V., contact information for two referees, and a statement of no more than 500 words about your background to Dr. Katy Gonder. Click here to learn more about the workshop.

SSSI Remote Sensing & Earth Observation Fields seminar, Sydney on Tuesday, 25 February 2014. Networking drinks afterwards at Cafe Lounge Sydney.

# 3D Printing Summer School - ADVANCE NOTICE - University of Melbourne

We are still awaiting details of the 3-D Printing Summer School to be conducted in late January/February 2014 at the University of Melbourne's School of Engineering. An Application Form (& Scholarship application) and further information is available here.

# PennState EDU Introduces Maps and the Geospatial Revolution Online Training

An amazing new effort from Penn State (PSU) kicks off this week in the form of a massive, online EDU offering - enter Maps and the Geospatial Revolution. In just 6-9 hours a week, students can enjoy this online offering and learn how advances in geospatial technology and analytical methods have changed how we do everything,





and discover how to make maps and analyze geographic patterns using the latest tools. The course is led by PSU instructor, Anthony Robinson. Geospatial Gurus may find the course a little simple but anyone else is encouraged to take part. <u>See the course program</u>.

Thanks to GISUser blog AND Meet the Man Who Wants to Teach the World to Make Maps above

### Arizona State University GIS Lab

A good place to get a sense of where the geographic information system (GIS) field is headed is Lattie F. Coor Hall at Arizona State University in Tempe, Ariz. That's the home of the 30-credit-hour Masters of Advanced Study in GIS (MAS-GIS) Program within ASU's School of Geographical Sciences and Urban Planning. Here, students are exposed to not only the latest GIS concepts but also ever-evolving technologies. Source: The American Surveyor

## Free Webinars on Solving Data Challenges

Sign up for future webinars and view past recorded webinars

## Course Spotlight: Master of Spatial Information Science

The University of Melbourne Course Spotlight: Master of Spatial Information Science

Spatial information is an essential and indispensable part of any economy's infrastructure. It is needed in all walks of life and on many scales, with applications in land tenure systems, environmental modelling, food production, disaster management, climate change modelling, engineering, architecture and urban planning. Current industry shortfalls in spatial information practitioners combined with a growing demand in Australia and internationally, ensure graduates a range of well-paid job opportunities.

Find out more about the Master of Spatial Information Science, as well as our scholarship opportunities.

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# Funding Opportunities, Awards, Grants

### <u>Early Careers Academic Grants 2013 – Round 2</u> Applications for the second round are now open. The final date for submissions is Friday, 7th February 2014, 1700 GMT.

To mark its Centenary, the Association of Commonwealth Universities (ACU) is offering 100 Early Career Academic Grants to staff at <u>ACU member universities</u> to attend relevant conferences or academic meetings in another Commonwealth country. The scheme is aimed at early career academics who have not yet had the opportunity to work, study, or travel outside their own country.

#### Terms and conditions

- Applicants will have discretion over what the grant is used for, but it must involve a visit to academic peers in a Commonwealth country outside their home region. In most cases, this will involve attendance at a recognised academic conference in their discipline. Potential hosts should be either an ACU member university in the country to be visited, or the organiser of a recognised academic conference.

- Grants can be used to cover travel costs, conference fees, accommodation and subsistence, and, where appropriate, small-scale purchases of materials for use in future teaching or research.

- Round 2 of applications is for visits to be made between 10 March and 30 June 2014.

- Each Early Career Academic Grant will be up to GBP 2,000 in value.
- Under no circumstances will the total value of the grant exceed that stated on the offer letter.

- Grants will be paid in a single instalment to either the grant holder's home institution, a host institution in the country to be visited (provided that the institution is an ACU member), or a named conference organiser. Successful applicants will be asked to nominate a recipient of funds.

- Grant holders will be asked to provide an account of expenditure and a brief report (no more than 500 words) on how their grant has been spent.

- The ACU reserves the right to publish the names of successful applicants on the ACU website and in ACU publications. By applying for a grant, the applicant gives consent for such publication in the event that his/her application is successful.

#### Eligibility

Applicants must:

(a) Be employed as a member of academic staff in an ACU member institution

(b) Not have previously studied for any academic or professional qualification outside their home country or region.

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(c) Not have attended any academic or professional conference outside their home country or region in the last five years

Although this scheme is aimed at early career academics, please note that there is no age limit for applicants. Applications from other groups – for example, established academic staff members, those recently embarking on an academic career following a career change, or women returning to academic work after raising children – would also be welcome, providing that they meet the above criteria. Applications should be sent via email.

### Singapore government introduces geospatial scholarship

The Singapore government has introduced the government on Friday introduced the Singapore Geospatial Scholarship, the first of its kind in the island nation. Senior Minister of State for Law and Education, Indranee Rajah, made the announcement on Friday last week. Rajah said the scholarship would be jointly conferred by several public agencies, and will meet the increasing demand for geospatial professionals for the industry. The scholarship is for undergraduate and postgraduate studies. More information is expected to be release later in the year. Ms Indranee noted that Geospatial Information Systems and Technology (GIST) touches many aspects of daily life, such as getting road directions on the smart phone, and providing live traffic condition updates. It is also used in monitoring dengue clusters, and managing issues such as climate change and disaster response

Channel NewsAsia

#### Ideas Challenge

The Ideas Challenge is at the core of the GMES Masters competition. It invites students, entrepreneurs, start-up companies and SMEs to submit their ideas for an innovative commercial use of GMES to a secure online database on the GMES Masters website. The best idea for a commercially viable business idea using GMES data will be rewarded. The winner will be rewarded with a cash prize of EUR 10,000 as well as the chance to get his idea further developed in one of the six ESA Business Incubation Centres (BICs). The incubation package has a value of up to EUR 60,000.

#### ESA App Challenge

The European Space Agency (ESA) will award the ESA App Challenge to the best application idea for the usage of GMES on mobile phones. Proposals shall address one or more GMES main thematic areas (land, marine environment, atmosphere, climate change, emergency management). ESA is looking for ideas that can be implemented quickly into a profitable business. The application should consist of a base app containing info and news on GMES, as well as one or more specific content modules that provide relevant location-based data to users in real time. The winner will be considered for support by one of the six European Space Agency's Business Incubation Centres (ESA BICs) across Europe (value up to EUR 60,000).

### European Space Imaging High-Res Challenge

European Space Imaging (EUSI) is Europe's leading provider of Very High-Resolution (VHR) satellite data. EUSI will award the best application idea using the most advanced VHR satellite data. Application ideas which are easily implementable, sustainable, cut costs and create efficiencies are of high interest. Participants are required to submit detailed application ideas including business concepts. The winner will be awarded a data package of EUSI satellite data worth up to EUR 20,000 for use in further developing the winning application.

#### **DLR Environmental Challenge**

DLR is looking for new applications in Earth observation, especially proposals addressing the mapping of the environment and climate. Ideas for using Earth observation to manage sustainable supplies of energy are also welcome. In addition to any kind of non-satellite geoinformation, proposals should be based on existing or imminent Earth observation satellite data that is available either for free or under commercial terms. The product or service generated from the idea should support either professionals from organisations and companies in environmental assessment, or the general public and consumer-oriented markets. Both regional and global applications and services are possible. Innovative ways to link the service with users are especially encouraged. The ideas should also describe a realistic scenario for their implementation involving either the general public or commercial benefits. The winner(s) will receive a voucher for a workshop or initial coaching according to what further realisation of the idea requires.



### Best Service Challenge

The Best Service Challenge invites service providers to upload profiles of their existing services within the main thematic areas of GMES to the GMES Masters competition website. The Best Service Challenge aims at increasing the awareness of existing Earth Monitoring Services and their benefits to European citizens. The winner of the Best Service Challenge will benefit from a substantial satellite data quota made available with financial support by the European Commission.

#### **T-Systems Cloud Computing Challenge**

T-Systems will award the prize for its Cloud Computing Challenge to the best GMES application or service idea that will make use of the cloud computing model Infrastructure-as-a-Service (IaaS) to provide Earth observation data on demand via user-oriented web portal or mobile devices. T-Systems will assist the winner in getting the awarded project off the ground. They will support the winner to realise an innovation project, which could lead to a long-term partnership.

#### Challenge to spur the geospatial industry

The Singapore Land Authority has launched OneMap Challenge that seeks to promote the development of innovative map-based desktop and mobile applications by businesses and the community.

The OneMap Challenge provides a platform for application developers to showcase their creativity through the apps they develop to an increasingly tech-savvy population and enterprises, including those represented by the Association of Small and Medium Enterprises (ASME) which is one of the competition promotion partners. The Challenge also aims to facilitate collaborations between potential business partners for creating location-based apps that are useful for business enterprises and the general community.

With two top prizes of \$20,000 cash each and other attractive prizes up for grabs, the OneMap Challenge is divided into two categories – Web Applications for applications that run on web browsers and Mobile Applications for those that run on smart phones, tablets and other portable devices.

Visit <u>http://www.sla.gov.sg/OneMapChallenge</u> to learn more about OneMap Challenge and check out the OneMap Facebook page at <u>www.facebook.com/OneMap</u>.

Source: Geospatial World and SLA press release

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# **Employment Opportunities**



**New career resource** at <u>GeoJobsBIZ</u>. There's been about 200 opportunities listed and the growth has been steady in visits and users. If you need to recruit Geo/Tech talent hopefully you'll give it a shot and those of you simply browsing for a new gig so you can tell the boss to go take a hike perhaps there's something here for you. Good luck!

#### GIS Job Board Launches New Website: www.gisjobboard.com

New Site Provides Employers and Job Seekers Tools to Post and Search Jobs and Resumes in the GIS and Geospatial Disciplines

GIS Job Board has launched a new website specifically dedicated to GIS and other geospatial disciplines. The new site makes it simple for employers and job seekers to post and search for jobs and resumes. The site was created to serve the growing needs of the GIS community and help with recruiting and job seeking efforts. Visitors also have the option to view the site in a different language if they choose, making it easier for them to have access to the content

Registered users can receive jobs or resumes by email. They can also flag jobs and resumes as well as save searches, setup resume alerts, and save resumes and jobs. Users have the capability of private messaging other users in case they ever want to communicate with someone.

For more information about GIS Job Board, please visit their website at www.gisjobboard.com



# **Conference Proceedings**

# APSRAC holds workshop on Spatial Data Infrastructure

Source: The Siasat Daily

### 37th ISO/TC 211 meeting successfully held November 11 - 15

During the week of November 11-15, 2013, the <u>Technical Committee 211 Geographic information/Geomatics</u> (TC 211) of the International Organization for Standardization (ISO) had its 37th plenary meeting and associated meetings at the Esri campus in Redlands, California. All the WGs met, as well as all the maintenance groups and other groups. Delegates and experts from 20 nations participated. <u>The resolutions from the plenary meeting have been published online</u>.

Presentations from <u>Standards in Action Workshop</u>, 13 November 2013, Redlands, CA USA The 38th ISO/TC 211 meeting will be held in <u>Berlin, Germany, June 2-4, 2014</u>

### First Heart of Borneo spatial meeting held October, 2013

Preceded by the recent 7th Heart of Borneo (HoB) Trilateral Meeting in Brunei in September 2013, HoB Geographical Information System (GIS) meeting was organized in October, for the first time since it was initially discussed in 2008. The discussion evolved around the organizational and working modalities of the technical committee on GIS, presentations on national policy on spatial land-use planning, and identification of possible joint activities.

The meeting was considered useful to build a better understanding on each country's land-use management and the underlying principles. It is a reality that each country in the HoB regulates different land use plans and therefore different land-use management. Despite the fact of differences, the three countries demonstrated willingness to cope with the challenge. With distinct land classification or nomenclature, the essential function of land-use planning is understood and has become reference and knowledge for each country to develop better policy and practices on land-use management that considers balance between conservation and development. See link above for full article.

The Heart of Borneo (HoB) refers to the main part of the island where forests remain intact. Covering an area the size of Utah in the US, Victoria in Australia or the whole of England and Scotland put together and extending into the territory of the countries of Brunei Darussalam, Indonesia and Malaysia, it is one of the largest transboundary rainforests remaining in the world. But the Heart of Borneo is not just a treasure trove of biodiversity - it is also a source of life and livelihood for people, providing ecological services for at least 11 million Borneans, including a million forest-dwelling indigenous Dayaks.

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# **Conferences, Events**

For upcoming events of global or major international interest, please visit the <u>upcoming conference list</u> on the GSDI website – as this conference list will be reserved for conferences within or with specific interest to the Asia Pacific Region.

#### The editors welcome news of conferences & events from the newsletter subscribers

#### Call for Expression of Interest to host AARSE 2014 and future Conferences

Call for Expression of Interest to host the 10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE) in October 2014 and future Conferences.

Date	Location	Event	
March 2014			
3-5 March	Ottawa, Canada	Geospatial Advancement Canada Conference	
"NEW"			Contact



11-12 March	Kota Kinabalu, Sabah	Malaysia Geospatial Forum 2014Incorporating SABAH International Surveyors' Congress 2014Abstract Submission Deadline15 January 2014Abstract Acceptance Notification20 January 2014Author Registration Deadline31 January 2014
23-27 March	Louisville, Kentucky, USA	<u>Contact</u> <u>American Society for Photogrammetry and Remote Sensing</u> (ASPRS) 2014 Annual Conference & co-located Joint Agency Commercial Imagery Evaluation (JACIE) Workshop
April 2014		
30 March-2 April	San Diego, California	<u>17th Annual AAAE Geographic Information Systems (GIS)</u> <u>Conference and Exhibition</u> Speaking, sponsorship, exhibitor and Poster Session information: <u>greg.mamary@aaae.org</u> Registration and hotel information: <u>brian.snyder@aaae.org</u>
7-9 April	Canberra, Australia	Research@Locate'14 Held in coniunction with LOCATE 14
7-9 April	Canberra, Australia	LOCATE 14 - Conference and Exhibition Locate14 is the new premier national spatial information conference and exhibition in Australia and New Zealand. Locate14 consolidates the top industry events including spatial@gov Conference and Exhibition (managed by the Office of Spatial Policy), the Surveying & Spatial Sciences Conference and the Asia-Pacific Spatial Excellence Awards. The annual Locate conferences will become the central meeting point of industry, government and academia in one of the fastest growing industries in Australia. <u>Registrations are now open</u> .
12-13 April	Washington, DC	State of the Map - US State of the Map US is the annual United States conference for all OpenStreetMap users
14-17 April	Colorado, USA	SPAR International 2014
May 2014		
5-9 May	Geneva, Switzerland	Geospatial World Forum 2014 EARLY BIRD REGISTRATION closes February 15 Contact: info@geospatialworldforum.org
8-9 May NEW"	Geneva, Switzerland	Land Information System for Smart Cities Part of Geospatial World Forum (see above)
5-9 May "NFW"	Walbrzych-Ksiaz, Poland	22 <sup>nd</sup> Cartographic School 2014 "Geoinformatics and Atmospheric Science" contact Dr Malgorzata Wieczorek phone: +48 71 375 22 30, email
21-23 May	Thessaloniki,	5th International Conference on Geographic Object-Based
luno 2014	Greece	Indge Analysis (GEODIA 2014).
2-6 Juno	Porlin Cormony	The 29th ISO/TC 211
2-6 June	Benn, Gernany	PDF brochure/flyer only available at this date. Website expected on-line shortly
16-20 June "NEW"	Aalborg, Denmark	The 8th INSPIRE Conference Awaiting official website
15–21 June	Riviera, Bulgaria	5th International Conference on CARTOGRAPHY & GIS January 10, 2014: Abstract submission February 25: Full paper submission for publication in Springer Book May 1: Full paper submission for Conference Proceedings Please be aware of the first deadline – 10 January 2014. You are kindly asked to submit:



		- abstract for conference proceedings
		OR
		- full paper in case you would like to propose a paper for publishing
16–21 June	Kuala Lumpur	XXV FIG Congress: Engaging the Challenges – Enhancing the
	Malavsia	Relevance
		IMPORTANT DATES
		Peer Reviewed Papers
		Deadline for authors to submit <b>full papers:</b> November 1, 2013
		First notification to authors of acceptance: December 19
		Non Peer Reviewed Papers
		Confirmation to authors of acceptance of abstracts: January 31
		Call for Papers
July 2014		
1-4 July	Salzburg, Austria	GI Forum 2014: Geospatial Innovation for Society
	_	Feb 1, 2014: deadline for submission of full papers / extended
		abstracts / extended abstracts for poster presentation
		March 16, 2014: notification of acceptance
		lune 6, 2014: late deadline for submission of extended abstracts for
		poster presentation
September		
2014		
8-13 September	Portland, Oregon	FOSS4G 2014
November		
2014		
9–11 November	Dubai, UAE	4th International FIG 3D Cadastre Workshop
		Tentative timetable:
		30 June 2014 - Extended abstract (500-1000 words) submission
		7 September 2014 - Author notification
		9 October 2014 - final version of full paper

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