

SDI-AP June 2013 Vol. 10, No. 6

Spatial Data Infrastructure – Asia and the Pacific (SDI-AP) is a free electronic newsletter from the Global Spatial Data Infrastructure Association (GSDI) 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 Permanent Committee on Geographic Information for Asia and the Pacific (PCGIAP), 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 Centre for Spatial Data Infrastructures and Land Administration at the University of Melbourne.





To subscribe to SDI-AP use this link. Back issues of the newsletter are at the GSDI website. You can also sign up for GSDI News List 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 please visit.

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Message from the editors

Welcome to the June issue of the newsletter.

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 25th 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 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.



GSDI News

GSDI and IGS Global News, Issue 3 Volume 3 for 2013

GSDI 14 Conference Preparations

Preparations continue for the joint <u>GSDI 14 World Conference and AfricaGIS 2013 Conference</u> scheduled to be held in Addis Ababa, Ethiopia, at the UNECA Conference Center, November 4-8 2013 in partnership with GSDI Association, EIS-Africa, the International Geospatial Society, EiABC - Addis Ababa University and the United Nations Economic Commission for Africa (UNECA).

AfricaGIS is the largest regularly occurring GIS conference in Africa with participants from the whole continent. The GSDI World Conference moves to sites across the globe to offer geospatial specialists from all parts of the world opportunities to better exchange ideas and learn from peers in building spatial data infrastructure. For past conferences.

The selected theme of the conference is "Spatial Enablement in Support of Economic Development and Poverty Reduction" The pressing needs of African nations, their citizens, and the needs of economically disadvantaged nations generally are a particular emphasis of the conference and include such concerns as:

- sustainable development,
- economic development,
- business intelligence and business geographics,
- disaster prevention, warning, management, response, and recovery,
- alleviation of poverty and crime,
- lessening the digital divide including access to information technologies,
- ensuring food security,
- support of transportation, health and communication systems, and
- facilitating land ownership.

Substantial reduction in registration fees will be available for local participants, members of EIS-Africa and members of the International Geospatial Society who are from low income per capita nations. Substantial reductions in Exhibit and Sponsorship fees will be available for companies and agencies that are members of the GSDI Association.

Consult the <u>web site</u> as the Call for Papers and details about the program, facilities and sponsorship opportunities become available.

We are now only two weeks away from the deadline for abstracts (for presentations) and full papers for peer reviewed publication – 15 May 2013!

This combined and fully integrated conference offers numerous opportunities for oral presentations and refereed and non-refereed publication outlets. We invite presentations covering the full range of practice, development and research experiences that advance the practice and theory of spatially enabling citizens, government, and industry. The conference theme is Spatial Enablement in Support of Economic Development and Poverty Reduction.

This call for papers supports two primary forms of publication:

(1) a Conference Proceedings, with Abstracts for all accepted submissions, and refereed and non-refereed Full Papers for some of the submissions, and

(2) a pre-conference published book containing fully refereed articles. The tentative title is "Spatial Enablement in Support of Economic Development and Poverty Reduction: Research, Development and Education Perspectives". The book will be published as an open access book in various e-reader formats.

* IMPORTANT CONFERENCE DATES *

Deadline for Submission of Abstracts: 15 May 2013

Deadline for Submission of Full Papers for Refereed Publications: 15 May 2013
Deadline for Submission of Full Papers for Non-refereed Publications: 1 Sept 2013
Deadline for Full Conference Registration Payment for All Presenters 15 Sept 2013
Conference Dates: 4-8 Nov 2013

* IMPORTANT CONFERENCE LINKS *

Joint Conference Call for Abstracts and Papers, Conference Website: Other Important Dates.

Past GSDI World Conference Proceedings. Past open access Books affiliated with the conference.

* JOIN the GSDI Association or International Geospatial Society to enjoy conference fee reductions! * Substantial reduction in registration fees will be available for local participants, members of EIS-Africa and members of the International Geospatial Society who are from low income per capita nations. Substantial reductions in Exhibit and Sponsorship fees will be available for companies and agencies that are members of



the GSDI Association.

Consult the <u>web site</u> for latest information and details about the program, facilities and Sponsorship opportunities. Come prepared to engage, learn and enjoy! More news on the conference in future issues!

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 http://www.igeoss.org/benefits. For further information, contact Harlan Onsrud, Executive Director, GSDI Association.

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 http://www.linkedin.com 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: http://www.gsdidocs.org/GSDIWiki/index.php/Main Page.

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:

- Digital Earth (International Society for Digital Earth).
- Eve 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).
- <u>UNESCO IOC</u> 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

Uruguay: SDI to be aided by bilateral agreement with South Korea

Experts from Uruguay and South Korea will boost the development of the Uruguayan spatial data infrastructure for capturing, storing, analyzing and displaying data on digital maps.

According to the Ministry of Communications of the Presidency, a bilateral agreement signed by both countries includes cooperation in geodetic research, mapping and remote systems development, cadastral mapping, databases and systems and spatial information, among other areas.



In Uruguay, the bodies linked to that infrastructure are the National Land Registry, the Military Geographic Institute, the National Bureau of Surveying, University of the Republic and the Ministry of Housing, Spatial Planning and the Environment.

Source: Prensa Latina, Montevideo, May 7, 2013? See also: Korea Exports Spatial Information Technology

Kenya: budget tabled for national SDI Centre, Land Information System

The Land, Housing and Urban Development ministry has been allocated Sh15.8 billion for the next financial year to implement functions previously under three ministries.

It is expected to implement at least 60 per cent of the National Land Policy recommendations, enact four land legislations and develop at least 80 per cent of the National Land Information System in the period. The National Spatial Data Infrastructure Centre must be completed in the next financial year, besides

completing at least 80 per cent of a Geo-referencing Centre, International Boundary Centre and inspecting national and international boundaries.

Source: The Star (Kenya)

South Africa: proposed Spatial Data Policy published for comment, National Gazette No 36470, Vol 575 The South African Department of Rural Development and Land Reform published on May 17, 2013 two draft policy documents in the national Government Gazette (No. 36470) in support of the Spatial Data Infrastructure Act (2003): a) Policy on Pricing of Spatial Information Products and Services, and b) a) Data Custodianship Policy.

The policy on pricing seeks to make spatial data more affordable, and it intends to bring about consistency in the way the pricing policy is applied in the public sector.

The data custodianship policy seeks define the criteria for appointment as a data custodian. It also aims to promote cooperation between the various data custodians.

May 21 Webinar presentation on Canada's Geospatial Policies

SDI Cookbook update

The SDI Cookbook, in its wiki version, now has an updated Chapter 10 to reflect the latest slate of standards and popular version numbers. We seek contributing editors for the other Chapters to also bring them up-to-date. About three months prior to the next GSDI Conference we will seek to affix a date and snapshot the Cookbook into a "SDI Cookbook 2013" PDF version. By saving a PDF and giving it a date of publication, it will clarify the reference and citation of the document and provide a time context.

If you are interested in helping update any of the chapters, please contact Douglas Nebert.

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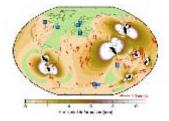
SDI Spotlight

This month's "Spotlight" feature has been held over as the contributors' submissions fell short of the high standards imposed by the editors.

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

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GIS Tools, Software, Data



Big earthquakes create global-scale GPS errors

Thirteen years of supersized earthquakes, such as Friday's magnitude-8.3 in Russia, have contaminated GPS sites around the world, a new study finds. The Global Positioning System is a network of satellites and ground stations that provide location information anywhere on Earth. Except for spots in Australia, western Europe and the eastern tip of Canada, every GPS site on the ground underwent small but important shifts since 2000 because of big earthquakes,



according to a study published May 6 in the Journal of Geophysical Research: Solid Earth.

Source: NBC Science News

New Esri Metadata Editing Tool

ArcGIS for Desktop empowers Desktop users to create content for multiple metadata standards.

To ensure users can meet the Australian New Zealand Land Information Council (ANZLIC) Standards, Esri Australia has released a special Metadata Editing Tool – a customised version of the existing ArcCatalog metadata entry interface. This is compatible with version 10.0.

The Metadata Editing Tool accommodates the ANZLIC metadata mandatory profile plus approximately 50 optional elements; and also streamlines and simplifies metadata entry. Metadata users can leverage the tool to configure custom pick lists and set default values for ANZLIC profile specific elements.

Metadata can be validated and exported to an ANZLIC compliant XML file and easily published from your local

desktop to the Geoportal Server or other Catalog Servers.

More information and Download the free tool.

DIY Mapping Goes Mainstream

A <u>DIY</u> aerial mapmaking <u>kit</u> from <u>The Public Laboratory</u> for <u>Open Science and Technology</u> that enables anyone with \$95, a camera, and some helium to become a citizen cartographer. The project empowers people to document events (oil spills, Occupy protests) that official mapmakers might overlook. But this kind of grassroots aerial surveying (distinct from <u>other forms of grassroots mapping</u>) also has another benefit: It produces bird's-eye images that are sharper and more beautiful than airplanes and satellites can capture.

To that end, a cache of more than 100 maps from the Public Lab project have now been incorporated into Google Earth itself, signaling some nice recognition of rogue mappers (and their DIY data) by the biggest commercial behemoth in the field. If you happen to stumble in your Google Earth wanders across a patch of surprisingly high-resolution landscape, you may be looking at a Public Lab contribution.

[Image: Citizen cartographer Alex Norman flying a delta kite from which a Canon S90 camera takes aerial photographs.]

RELATED - The Future of Aerial Mapmaking: Cheap Helium Balloons

Most of the aerial imagery you've looked at, probably on Google Maps, is shot from high-altitude airplanes that are able to capture images of earth where one square pixel represents about one square foot of land. This resolution is better than what you'd get from a satellite, where a pixel covers maybe a square meter. From a satellite, you can make out a vehicle on the road. From a high-altitude airplane, you can tell if it's a car or a truck.

Neither option, though, can really bring you down to the intimate view of children playing in a park fountain or hot-dog vendors on a sidewalk. Some DIY aerial mapmakers have toyed with collecting this level of data from remote-controlled airplanes.

"You hear about people using them experimentally," says cartographer Stewart Long. "But they're all kind of... unofficial, and not really legal."

The Federal Aviation Administration doesn't particularly like amateurs piloting unmanned aircraft over our city streets. (This is also why commercial drones for domestic use, in their various forms, are still a ways off). But here's a catch: no one says you can't do your own aerial map-making of cities and landscapes with a balloon. Or a kite.

The <u>Public Laboratory for Open Technology and Science</u>, a project of Long's with several partners, actually sells <u>a \$95 DIY balloon mapping kit</u> that will get you started. "The design of the platform is very specific so it doesn't fall within regulations," Long says. "By that I mean you can pretty much do whatever you want with this thing."

Sources: The Atlantic "Cities"

Open Source Geospatial Laboratory established at the University of Southampton, UK

The laboratory is one of the members of a worldwide network developed under the auspices of the ICA-OSGeo Memorandum of Understanding (MoU).

In 2011, the International Cartographic Association (ICA) signed a Memorandum of Understanding (MoU) with the Open Source Geospatial Foundation (OSGeo) with the aim to develop global collaboration opportunities for academia, industry and government organisations in the field of open source GIS software and data. The MoU aims to provide expertise and support for the establishment of Open Source Geospatial Laboratories and



Research Centres across the world and will support the development of open source geospatial software technologies, training and expertise.

The University of Southampton is one of the top research universities in the UK and has strong research in geospatial science. The University of Southampton Open Source Geospatial Laboratory (OSGL) has been established by the GeoData Institute and Geography and Environment AU in collaboration with other initiatives in the UK and further afield. The initiative brings together staff from various disciplines (Engineering, Geography, Electronics and Computer Science) across the university.

The <u>Laboratory</u> will engage in open source research for geospatial software and data, using open source geospatial software and data as tools and contributing to the development of tools, standards and data through research. The lab will seek to exploit new opportunities for research, often in partnership with other OSGLs and members of the ICA-OSGeo initiative. The Laboratory will also deliver open source geospatial training and CPD programs.

OSGeo is a not-for-profit organisation founded in 2006 whose mission is to support and promote the collaborative development of open source geospatial technologies and data.

ICA is the world authoritative body for cartography, the discipline dealing with the conception, production, dissemination and study of maps.

Source: OSGeo

Australian Earth Observation Coordination Group (AEOCG) Whole of Community Meeting, April19, 2013

AEOCG's first get together for a discussion on AEOCG and its role in linking the EOS (Earth Observation System) community with government and industry coordination activities.

<u>Australian Earth Observation Coordination Group</u> is a collective group that provides a coordinating and sharing point for all people using images collected from satellite, airborne or any other platform for any purpose in Australia. AEOCG covers research, private industry, government, education and non-government activities.

This covers people working across all natural and built environments, spanning, the earth's atmosphere, terrestrial, aquatic, urban and marine environments.

This group was formed to enable ALL of the people who collect and use earth observation data to have a forum to present and discuss their activities and define their needs for support from industry, academia and government. This is not a government focussed, spatial-science special interest group. It is meant to span all disciplines and provide an inclusive and collaborative resource to improve access to and use of earth observation data for Australia.

See copy of the <u>presentation</u>, along with a recording of the webinar and polling results from the presentation.

New Zealand: LINZ funds location-based learning

Readers should note that this opportunity is ONLY AVAILABLE to NZ students – it is reported here only for its newsworthy interest.

Last year, Land Information New Zealand agreed to fund three geospatial Virtual Field Trips (VFT) to help school students understand the career opportunities offered by the spatial sciences.

The series of field trips are all focused on how geospatial, or location-based, information is being used to support the recovery and rebuild in Canterbury.

The first took place in August 2012, and the second is set for the end of May 2013.

Virtual Field Trips use multimedia and web technologies to enable school students from participating schools to interact with inaccessible places and people without leaving their classroom.

"The rebuild of Canterbury relies on information about where things are – from invisible infrastructures like electricity and water pipelines, to information on property boundaries, land use and ownership. This gives us a great opportunity to illustrate how location-based information contributes to so much of our every day life," says Geoff O'Malley, Principal Analyst in the New Zealand Geospatial Office.

"The spatial sciences are a growth area both in New Zealand and internationally, and we're working to boost the longer term capability of New Zealand to meet this growth through getting school students interested in the opportunities presented by location-based information."

Any NZ registered teacher can enroll their class in this VFT for free. So point any teachers you know in the direction of the LEARNZ website for more information.

New Zealand: LINZ To provide easier access to land records

A new project about to get underway at Land Information New Zealand (LINZ) will soon see New Zealand business and the general public gain easier, faster and cheaper access to land records – streamlining the process involved when people are considering buying or selling property.



The project will deliver two online services: one allowing the public to find and purchase land records – such as property titles – automatically and instantly, and a business-to-business web interface through which land search businesses can provide records to customers.

Global Roads Open Access Data Set, Version 1

CIESIN has released a digital global data set on intercity roads, the Global Roads Open Access Data Set, Version 1 (gROADSv1). Developed under the auspices of the Global Roads Data Development Task Group of the Committee on Data for Science and Technology (CODATA) of the International Council for Science, gROADSv1 combines the best available open access data on roads between human settlements into a global roads coverage consistent with the United Nations Spatial Data Infrastructure Transport (UNSDI-T) version 2 data model

This first version of the gROADS data set is part of a continuing effort to address the need among professionals in the humanitarian response, development, transportation, biodiversity conservation, and allied fields for free and open, spatially accurate, and readily updateable data on roads in order to better understand issues such as market access, cost of transportation, and human pressures on the environment. Data on road networks connecting human settlements may be especially valuable when used in conjunction with remote sensing and other spatial data to improve decision making related to urbanization and rural development. gROADSv1 is being distributed by the NASA Socioeconomic Data and Applications Center (SEDAC) operated by CIESIN, and represents an important step towards addressing the criteria established by the CODATA Task Group.

OpenStreetMap Rolls Out a New easy map editor and Switch2OSM

The new editor, codenamed 'iD', boasts an intuitive interface and clear walk-throughs that make editing much easier for new mappers. By lowering the barrier to contributions, we believe that more people can contribute their local knowledge to the map – the crucial factor that sets OSM apart from closed-source commercial maps. Source: AnyGeo blog and OpenStreetMap blog

Data Basin - Free and open access supports learning

Data Basin is a science-based mapping and analysis platform that supports learning, research, and sustainable environmental stewardship. Free membership is available to those looking for added networking, access to educational materials, tools, data and more. The core of Data Basin is free and provides open access to thousands of scientifically-grounded, biological, physical, and socio-economic datasets. A team of scientists, software engineers, and educators at the Conservation Biology Institute (CBI) built Data Basin. This user-friendly platform enables people with varying levels of technical expertise to:

- Explore and organize data & information
- Create custom visualizations, drawings, & analyses
- Utilize collaborative tools in groups
- Publish datasets, maps, & galleries
- Develop decision-support and custom tools

Source: AnyGeo blog and http://databasin.org/

First Look - Exploring The New Google Maps

gMaps Keeps Getting Better - Top 10 awesome features coming in the new Google Maps by Glenn Letham

Source: AnyGeo blog

See Also - Here's What Google Maps' Customization Might Mean in Practice from The Atlantic "Cities"



This Cutting-Edge Map Tool Turns Anyone Into a Cartographer

Back in January, OpenStreetMap passed the 1 million mark of registered users, with contributors from all over the world – amateur cartographers, tech-savvy developers and people not particularly fluent in either maps or technology – adding to a growing picture of the world drawn by its own people. In the mapping universe, their collective effort has become the open-source antipode of proprietary giants in the business like Google Maps. Most mapping data in the world today is owned by someone. The information layered in OpenStreetMap is not, and that is precisely what makes it so valuable.

Now, the global project that was first launched in 2004 is growing up: OpenStreetMap today unveiled a new super-fast map editor that will give laymen near professional-grade tools to edit the world. A million people working together have now been armed to take on Google. And the product of their efforts – free geographical data that can form the foundation of infinite apps, tools, and even art – can be used by anyone.

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Source: The Atlantic "Cities"



OpenGeo launches Mapmeter Public beta

On Friday, May 24, 2013, at Sponsor Day at FOSS4G-NA 2013, OpenGeo announced a full public beta of its new server analytics console. The product, formerly known as "The Enterprise Console," is now <u>Mapmeter</u>, a full administration and management tool for analyzing GeoServer systems.

Mapmeter enables organizations to monitor the health of production deployments, optimize applications during development and diagnose critical issues. With these details, administrators and managers alike can better—and more cost effectively—make decisions about their geospatial deployments.

Mapmeter sits on top of GeoServer—within the OpenGeo Suite or standalone. As a complete web-mapping solution, the Suite enables organizations to easily install, effectively operate and optimally manage spatial assets

The Suite is commercial open source software, offering customers the best of open source (greater access and control, scalability, customization and more) with the assurance of standards compliance, expert support and advanced capabilities guaranteed by OpenGeo. With Mapmeter, spatial monitoring and reporting become one piece in a complete IT workflow.

Historical Maps Still Matter

Interview with David Rumsay, owner of one of the world's finest private map collections.

Source: The Atlantic "Cities"

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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.

OGC standards support US President's National Strategy for Civil Earth Observations

Contact: info@opengeospatial.org

23 May 2013 - <u>The Open Geospatial Consortium</u>'s (OGC®) standards are cited in the Obama Administration's National Science and Technology Council's (NSTC) recently released "<u>National Strategy for Civil Earth Observations</u>—a framework for increasing the efficiency and effectiveness of the Nation's Earth-observation enterprise."

The OGC WaterML 2.0 Encoding Standard, recently approved by the OGC membership, has been endorsed as an official component of the civil Earth observation strategy of the federal government of the United States. The National Strategy for Civil Earth Observations identifies 12 "Societal Benefit Areas" for collection of information, one of which is water. The report states, "WaterML: Water Markup Language (ML) is an informatics initiative of the CENRS Subcommittee on Water Availability and Quality that provides a systematic way to access water information from point observation sites." CENRS is the NSTC's Committee on Environment, Natural Resources, and Sustainability.

OGC Web Services, including the OGC Web Map Service (WMS), Web Feature Service (WFS), and Web Coverage Service (WCS) interface standards are listed in another NSTC document, "Exchanging Data for Societal Benefit: An IEOS Web Services Architecture", which is referenced in the Data-Management Framework section in the National Strategy document. IEOS is the US National Oceanic and Atmospheric Administration's (NOAA) Integrated Earth Observing System. The Architecture and Data Management Working Group of the NSTC-led United States Group on Earth Observations (USGEO) prepared the document. It states on page 4: "An Internet-based service-oriented architecture is the ideal approach for developing interfaces to both new and legacy data and information systems contributing to IEOS. Standards-based service interfaces can then be designed to promote interoperability and allow users seamless access to USGEO data and services from multiple sources."

Through USGEO, the United States is a founding member and vital contributor to the intergovernmental Group on Earth Observations (GEO). GEO, a group of 88 nations and the European Commission, is developing the Global Earth Observation System of Systems (GEOSS). GEOSS is a set of agreements and technical arrangements being developed to link together existing and planned observing systems around the world. The OGC, a Participating Organization in GEO, leads the GEOSS Architecture Implementation Pilot (AIP).

Source: OGC Press Release





Imagery of Moore, Oklahoma before and after May 20 tornado

The Pléiades satellites, operated and built by Astrium have captured images of Moore, Oklahoma, which clearly shows the devastation caused by the massive tornado that swept through the region on May 20, 2013. Source: AnyGeo blog

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Articles

Data Citation Standard: A Means to Support Data Sharing, Attribution, and Traceability (PDF)

Authors: McCallum, H., P. Plag, S. Fritz, and S. Nativi; E3S Web of Conferences 1, 28002 (2013) **Abstract:** An important incentive for scientists and researchers is the recognition and renown given to them in citations of their work. While citation rules are well developed for the use of papers published by others, very little rules are available for the citation of data made available by others. Increasingly, citation of the source of data is also requested in the context of socially relevant topics, such as climate change and its potential impacts. Providing means for data citation would be a strong incentive for data sharing. Georeferenced data are crucial for addressing many of the burning societal problems and to support related interdisciplinary research. The lack of a widely accepted method for giving credit to those who make their data freely available and for tracking the use of data throughout their life-cycle hampers data sharing. Furthermore, only clear and transparent data citation allows other scientists to obtain the identical data to replicate findings or for further research.

Key words: data citation, GEOSS, GEO

Cutting up the coast: natural problems need natural boundaries by Tom Fitzgerald

Coastal management jurisdictions representing geographically larger areas would provide a better solution to current constraints. Limited human and financial resources could be pooled, efficiencies gained, knowledge shared, and funding shortfalls could be better leveraged from other sources. For small councils, inadequate resourcing and limited funds have always been the difficulty in managing the coast effectively. Any new, larger jurisdictions should be based on ecosystem or geophysical boundaries. In the UK, Shoreline Management Plans are based not on arbitrary government boundaries but on "sediment cells". Sediment cells are large sections or compartments of the coast with similar environmental conditions. Source: The Conversation

Stul T, Gozzard JR, Eliot IG and Eliot MJ (2012) <u>Coastal Sediment Cells between Cape Naturaliste and the Moore River, Western Australia</u>. Report prepared by Damara WA Pty Ltd and Geological Survey of Western Australia for the Western Australian Department of Transport, Fremantle. (PDF)

Woodroffe, CD, Cowell, PJ, Callaghan, DP, Ranasinghe, R, Jongejan R, Wainwright, DJ, Barry, SJ, Rogers, K, Dougherty, AJ (2012), <u>Approaches to risk assessment on Australian coasts:</u> A model framework for assessing risk and adaptation to climate change on Australian coasts, National Climate Change Adaption Research Facility, Gold Coast (PDF)

TIME and Space by Jeffrey Kluger

Spacecraft and telescopes are not built by people interested in what's going on at home. Rockets fly in one direction: up. Telescopes point in one direction: out. Of all the cosmic bodies studied in the long history of astronomy and space travel, the one that got the least attention was the one that ought to matter most to us—Earth. That changed when NASA created the Landsat program, a series of satellites that

would perpetually orbit our planet, looking not out but down. Surveillance spacecraft had done that before, of course, but they paid attention only to military or tactical sites. Landsat was a notable exception, built not for spycraft but for public monitoring of how the human species was altering the surface of the planet. Two generations, eight satellites and millions of pictures later, the space agency, along with the U.S. Geological Survey (USGS), has accumulated a stunning catalog of images that, when riffled through and stitched together, create a high-definition slide show of our rapidly changing Earth. TIME is proud to host the public unveiling of these images from orbit, which for the first time date all the way back to 1984.

Source: Time magazine



A visualization-enhanced graphical user interface for geospatial resource discovery

Annals of GIS, published online: 23 Apr 2013 (not an open access journal)

Authors: Zhipeng Gui, Chaowei Yang, Jizhe Xia, Jing Li, Abdelmounaam Rezgui, Min Sun, Yan Xu & Daniel Fav

Abstract:

Information visualization and user interaction play critical roles in geospatial resource discovery processes. Well-designed graphical user interfaces improve user experience and also help convey important information to assist decision-making. Existing approaches have visualization problems that impact the efficiency of geospatial resource discovery including (1) search portals lack intuitive and diverse information visualization methods to present search results; (2) functions to sort, filter, explore and analyse search results are inadequate and inefficient and (3) value-added information to help users make selection is missing. To address these problems, we propose a visualization- and interaction-enhanced discovery workflow. We use the latest Rich Internet Application (RIA) technologies from Microsoft to implement the proposed methods for our search portal â€' GeoSearch. Specifically, (1) based on the Pivot Viewer, a multiple sorting, filtering and multi-level-zoomenabled histogram clustering function is implemented to assist in records exploration. (2) A Bing Maps Viewer is built upon the Bing Maps Control to show geo-location (e.g. BoundingBox and server location) of resources and conduct map-based interactions. (3) Multiple data visualization tools are integrated to provide data preview and animation functions. (4) A service quality viewer is developed to help users select resources based on nonfunctional properties. Results show that the proposed visualization and interaction technologies improve user experience and can help users obtain required geospatial resources effectively and efficiently.

The Law Governing Acquisition and Use of Earth Observation Data in South Africa: A Need For Legal Harmonisation by Phetole Patrick Sekhula, South African Journal of Geomatics, Vol 2, No 2 (2013) Abstract

The law on acquisition and use of earth observation data in South Africa is scattered through various pieces of legislation residing in different user entities. The primary pieces of legislation governing earth observation, The South African Spatial Data Infrastructure Act of 2003 provides for the institutional framework to enhance the acquisition, integration, distribution and use of spatial data, including satellite-derived data while the South African Space Affairs Act of 1993 establishes a regulatory framework for use of outer space, which satellite earth observation is a great component. There is also the South African National Space Agency Act of 2008, which authorises the South African National Space Agency (SANSA) to acquire and utilise satellite remote sensing data.

It is of great concern that these various pieces of legislation confer authority on various entities to acquire, integrate, enhance and disseminate earth observation data. There is a great risks of duplication of effort leading to increased costs for the users of earth observation data and an unnecessary drain on the national fiscus since the majority of these entities are either State-owned and/or funded by the Treasury. Full text.

<u>Launching a New Surveying Perspective</u> by Mary Jo Wagner, The American Surveyor, Vol 10, No 6 It used to be that Rodolphe Jobard would assemble and fly remote-controlled airplanes in his spare time. Now, he is actually paid to do it.



Jobard, a professional engineer with EDF Energy, can routinely be seen walking to the center of a massive, dirt-laden field, assembling a catapult and launching an unmanned aerial system (UAS) into the sky. It's a nearly weekly ritual that Jobard has been performing since last May as part of his project management tasks for EDF's expansion project at Hinkley Point nuclear power station in Somerset, England.

"I knew shortly after arriving on site that we would need aerial photography and conventional aerial surveying approaches would be a challenge," explains Jobard, EDF's aerial intelligence team leader and a qualified pilot. "In particular, we're building near an existing nuclear power station, which presents airspace-access

issues, and cloud cover is a constant problem. A UAS aerial surveying system would resolve both the airspace and cloud cover issues and enable us to have an overview of the Hinkley site as often as we need."

And it was a ground-breaking decision--it made Jobard the first-ever UAS user in EDF and in the United Kingdom, and a pioneer in the nuclear power industry--that has shown its worth in the air and on the ground.



Indeed, the UAS has not only proven to be the most efficient and effective means to map the site, it has become a core data source for many business applications.

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Books and Journals (including Videos and Web publications)

Atlas of Urban Expansion

The main objective of this *Atlas of Urban Expansion* is to increase understanding and help residents, policy makers, and researchers around the world come to terms with the expected global urban expansion in the coming decades. The Atlas in book form introduces the project and presents two sets of full-color maps and a set of raw data tables. The first map section contains pairs of urban land cover maps from circa 1990 and 2000, representing a global sample of 120 cities. The second map section includes composite maps of a global representative sample of 30 cities, showing the historical expansion of their urbanized areas from 1800 to 2000. In both sections, the maps shown are paired with numerical and graphical data, making it possible to compare cities in terms of their metric values on key attributes of urban expansion. The third section contains four extensive tables of urban, national, and regional data for each of the 120 cities.

Data and images from the Atlas of Urban Expansion are available for download on the companion website. Section 4: Geographic Information System (GIS) Data for Cities

The GIS data used in the analysis and in making the maps can be downloaded from the website. GIS software, such as ArcGIS, is required to view these data.

For each city in the 120 city sample, these data include:

- 1.two urban land cover maps, one circa 1990 and one circa 2000;
- 2.the administrative boundary shapefile:
- 3.two maps of the urban landscape categories, one circa 1990 and one circa 2000;
- 4.the map of new development categories (infill, extension, leapfrog).

For each city in the 30 city historical sample, these data include the urbanized area shapefiles for each time period.

Use of data should include the following citation: Angel, S., J. Parent, D. L. Civco and A. M. Blei, 2010. *Atlas of Urban Expansion*, Cambridge MA: Lincoln Institute of Land Policy, online at http://www.lincolninst.edu/subcenters/atlas-urban-expansion/.

3D Visualisation World (April 2013 newsletter)



SDI Cookbook update

The SDI Cookbook, in its wiki version, now has an updated Chapter 10 to reflect the latest slate of standards and popular version numbers. We seek contributing editors for the other Chapters to also bring them up-to-date. About three months prior to the next GSDI Conference we will seek to affix a date and snapshot the Cookbook into a "SDI Cookbook 2013" PDF version. By saving a PDF and giving it a date of publication, it will clarify the reference and citation of the document and provide a time context.

If you are interested in helping update any of the chapters, please contact Douglas Nebert.

2013 GIS in Local Government Benchmark Study - Preliminary Report

The 2013 GIS in Local Government Benchmark Study: Preliminary Report is the culmination of a collaborative effort between Australia's councils, SSSI and Esri Australia. The Report, which contains the Study findings, was compiled by an independent research agency.

It provides an outline of how councils across the country are currently using GIS and also how they plan to use it in years to come.

The Report also highlights new trends and areas of growth for the sector.

Most importantly, it provides the opportunity for councils to share knowledge and insights with each other that will impact future technology strategies; and support collaboration in areas from community engagement to emergency response.

A copy of the Report has been provided exclusively to Study participants - however, you can read an overview of the findings in the articles at the link above.

GSDI and IGS Global News, Issue 3 Volume 3 for 2013



NewGeography website

Mapping London blog

LandScan: a news update from Land Information New Zealand, Issue 64 (March 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 Strange Maps

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

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

New Zealand - SDI Cookbook Chapter 6 – Government and Industry, moving forward.

Carnival Of The Geospatialists #3 - Musings and Down-Right Cool Things Shared by the Geo Faithful

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

SDI Magazine

Mother Pelican: A Journal of Sustainable Human Development

The December 2012 issue has been published

LiDAR News, Vol 3, No 9 (May 29, 2013 Newsletter)

LiDAR News magazine (May-June, Vol 3, No 3, 2013)

Think Quarterly – Google's new on-line magazine

Coordinates 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 (May 28)

The American Surveyor Vol.10 No.6 (May 2013)

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

UN-SPIDER March 2013

Thematic Mapping blog

Terrain mapping with Mapnik

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Just for Fun!

An Emotionally Intelligent GPS System

Imagine choosing not just the quickest path to your destination but the one that is most likely to lift your mood. Patent no. 8,364,395 fuses advances in mapping and traffic data with those in mood detection to form an emotionally intelligent navigation system.

Route-planning devices and maps already allow users to choose a path that avoids tolls or traffic jams. And some technologies can gauge mood: microphones detect vocal<u>stress</u> in drivers asking for directions or screaming expletives; sensors detect a driver's pulse and sweaty palms on the steering wheel; and software mines social-media streams for users' emotions and locations.

A new device, designed by IBM researchers, could help tourists navigate unfamiliar cities, avoiding protests and road-rage incidents but taking in buzz-generating restaurants or tranquil scenery. Emoticons displayed along the routes would serve as guides.

The device factors in recent history. "You can choose a destination where people are happiest now or where people over the last week" have been happy, says co-inventor Paul B. French, a systems architect at IBM. If an area cheered visitors up, the system would classify the route as mood-enhancing. "The change of mood," he says, "is key."

Source: Scientific American



Creative Cartography Meets Music in The Song Map

enter the Music Map. Deisgned by the crew at Dorothy, the map is a a fictional Music Town with places and street names penned from popular tunes
imagine walking down the Highway to Hell! Oh and the map also has an accompanying Spotify list too – sweet! See more over on NME and thanks to @mcg_h for the Tweet!

Song Map is <u>available for purchase from Dorothy</u> – About the Map – The print, which was inspired by our own unhealthy obsession with music, is for fellow music geeks and includes an A-Z key listing all featured songs along with the names of who sang them. And we've set up a playlist on Spotify to accompany

the Map providing 23 hours worth of music.

Source: AnyGeo blog

Map Diving – virtual sky diving with the assistance of Google Maps

Something fun that's coming at Google I/O 2013 – map diving! Here's a first look at a fun 3D virtual Google maps realistic fly-through experience that will be shown off at Google I/O.

Source: AnyGeo blog





28 years of LandSat timelapse photography of Planet Earth

One of our greatest innovations is our ability to look at our planet from the heavens. From hundreds of miles above the surface of our planet, we can see how everything fits together. We can see the erosion of soil over millions of years, and life that springs up in the presence of water. We also see the human experiment play out on fields and plains, along rivers and oceans. From up there, our mark is left on the planet in the form of a gray organism of concrete and steel that grows and spreads to fill in valleys and dot mountain ridges. And miles away from urban centers, other signs of our existence are found: forests are cleared and lakes are depleted. Google's Earth Engine project lets us see these changes happening over time. Google highlights changes on the planet's surface in eight spots around the world: the booming city of Las Vegas, coal mines spreading across Wyoming, irrigation in Saudi Arabia, Lake Urmia, Iran drying up, Amazon deforestation, the Columbia Glacier retreating, coastal expansion in Dubai, and the Aral Sea drying up.

Source: Google Earth Engine, Scientific American blog and Time magazine

Climate Change Has Shifted the Locations of Earth's North and South Poles

Global warming is changing the location of Earth's geographic poles, according to a study in <u>Geophysical Research Letters</u>. Researchers at the University of Texas, Austin, report that increased melting of the Greenland ice sheet — and to a lesser extent, ice loss in other parts of the globe — have helped to shift the North Pole several centimetres east each year since 2005.

Source: Scientific American and Nature

Play This Utterly Addictive Geography Game

A few months ago, *The Atlantic* "Cities" covered the devastatingly <u>difficult city-guessing game Pursued</u>, which puts you in a random city and asks you to name it.

Now we have a new hobby: <u>Geoguessr</u>, which drops you anywhere that Google has put its Streetview cameras in use. (Though it seems heavily biased towards Australia, for some reason.)

You get as much time as you need to figure out the location, and if you're so inclined, you can move around as well, hunting for language, infrastructure, terrain, and other giveaways. Unlike Pursued, you get points for proximity, so if you can nail down that something is in the Midwest or New Zealand, you don't need to pinpoint its exact location.

Then, you can share your "game" -- a series of five random landscapes -- with friends, to see if they can beat your score. My high score was 11,049, and you can play with the same five landscapes here. Source: The Atlantic "Cities"



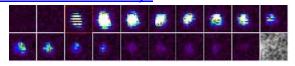
After 5 months in Space, the Commander of the International Space Station and his colleagues have returned to Earth. Besides his much followed blog, the Commander also recorded his own cover version of David Bowie's "Space Oddity"

Chris Hadfield's photographs of Earth from space - in pictures

Source: The Guardian

A meteoroid explosion on the Moon so bright it could be seen It with the naked eye

In March, NASA observed an explosion so bright it would have been visible from Earth without a telescope. "For about one second, the impact site was glowing like a 4th magnitude star." It was nearly ten times as bright as any other previously recorded impact.



Source: The Atlantic and NASA Science News

Lewis and Clark, Meet Foursquare

From Herodotus to *The Hobbit*, some books require two bookmarks: one for the text, and one for the map. But if you'd like to relive some of history's real greatest journeys without flipping back the pages, George Stiller has a website for you: MyReadingMapped, a compendium of cartographed history. Stiller has engineered 131 of what he calls "documentaries" -- interactive maps of wars, expeditions, and pilgrimages furnished not only with location markers but with prose, or in some cases photographs of buildings, paintings or sculptures. Plunge into the East African jungles with Sir Henry Morton Stanley, the Breaker of Rocks, or trace the cantilevers of Frank Lloyd Wright. Follow Alexander the Great through Central Asia or explore the battlefields of the Revolutionary War. By downloading KML files, you can use Google Earth to climb Mt. Everest with Sir Edmund Hilary or tag along with Lewis and Clark on their exploration of the Louisiana Territory. Source: The Atlantic "Cities"



These Incredible Maps Were Made With Thousands Of Photographs



Japanese photographer Sohei Nishino created these wonderful pieces of art by actually using individual pictures of landmarks and locations to map out the city. Nishino walks around each city for months and takes the photographs himself. It's a map that shows you the actual city, not just an outline. At left is part of New York including Central Park. The Diorama Maps are made from Nishino's experience of

travelling around a city. He sketches a rough outline of the city's layout

and then cuts up pictures and glues them into a map. It's not going to be completely accurate, but you can definitely see the shape and more importantly the soul of the city come to life with his maps.

Source: Gizmodo

The well-dressed surveyor/cartographer's wardrobe

Source: HomegirlLondon.com

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Training Opportunities

The GCS Geospatial Big Data Webinar Series

GCS has announced a new webinar series focused on developing solutions to the challenges of Geospatial **Big Data** by leveraging the fusion of location analytics, mobile platforms and cloud technologies. The first webinar (**June 12, 2013**) will feature Montana Site Selector, a cloud-based, web-enabled GIS application that GCS built for a consortium of economic development organizations. The first GCS Geospatial Big Data webinar will offer valuable learning opportunities for large organizations that must manage and make geospatial information available to staff in many locations across the enterprise. Webinar attendees will learn to:

- Develop a next-generation, web-based GIS enabled with Cloud technology
- Streamline complex workflows with advanced location analytics,
- Derive meaningful intelligence from multiple disparate data sets,
- Deliver business insights to personnel and the public via the mobile devices they use every day.

To register for the first GCS Geospatial Big Data webinar, visit the new GCS website. The one-hour free webinar will be broadcast live at 3 pm (U.S. Eastern Daylight Time) on Wednesday, June 12, 2013. Register for the New GCS Webinar Series: "Geospatial Big Data" First Webinar – June 12 – "Building, Deploying and Managing Geospatial Applications in the Cloud."

Source: AnyGeo blog

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

Maps and the Geospatial Revolution Coursera course offered by Penn State University

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.

Workload: 6-9 hours/week Next Session: Jul 17th 2013 (5 weeks long

The past decade has seen an explosion of new mechanisms for understanding and using location information in widely-accessible technologies. This Geospatial Revolution has resulted in the development of consumer GPS tools, interactive web maps, and location-aware mobile devices. These radical advances are making it possible for people from all walks of life to use, collect, and understand spatial information like never before.

This course brings together core concepts in cartography, geographic information systems, and spatial thinking with real-world examples to provide the fundamentals necessary to engage with Geography beyond the



surface-level. We will explore what makes spatial information special, how spatial data is created, how spatial analysis is conducted, and how to design maps so that they're effective at telling the stories we wish to share. To gain experience using this knowledge, we will work with the latest mapping and analysis software to explore geographic problems.

New Zealand: LINZ funds location-based learning

Readers should note that this opportunity is ONLY AVAILABLE to NZ students – it is reported here only for its newsworthy interest.

Last year, Land Information New Zealand agreed to fund three geospatial Virtual Field Trips (VFT) to help school students understand the career opportunities offered by the spatial sciences.

The series of field trips are all focused on how geospatial, or location-based, information is being used to support the recovery and rebuild in Canterbury.

The first took place in August 2012, and the second is set for the end of May 2013.

Virtual Field Trips use multimedia and web technologies to enable school students from participating schools to interact with inaccessible places and people without leaving their classroom.

"The rebuild of Canterbury relies on information about where things are – from invisible infrastructures like electricity and water pipelines, to information on property boundaries, land use and ownership. This gives us a great opportunity to illustrate how location-based information contributes to so much of our every day life," says Geoff O'Malley, Principal Analyst in the New Zealand Geospatial Office.

"The spatial sciences are a growth area both in New Zealand and internationally, and we're working to boost the longer term capability of New Zealand to meet this growth through getting school students interested in the opportunities presented by location-based information."

Any NZ registered teacher can enroll their class in this VFT for free. So point any teachers you know in the direction of the <u>LEARNZ website</u> for more information.

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>Academic Bursaries for FOSS4G Nottingham 2013</u> - The Global Conference for Open Source Geospatial Software

The FOSS4G2013 LOC has announced a limited number of Academic Bursaries for exceptional students and early career researchers to participate and contribute to FOSS4G 2013. The organizers are extremely grateful for EDINA's support which made this possible.

More details at

The deadline for applications is 21 June 2013.

The provisional conference program is now available, while the workshops can be viewed here.

The final programme will be announced on Monday 17th June.

Singapore Government launches app competition

The Singapore Government announced the launch of <u>Apps4SG</u>, an app development competition promoting the use of government data in developing innovative applications. **The Competition is open to all Singapore residents**.

To be eligible for the competition, a developer must create either a mobile or web-based application featuring the use of at least one government dataset.



The government is offering three attractive cash prizes to winners - the first prize is SG\$10,000, the second SG\$5000, and the third SG\$3000. In addition, all apps will be eligible for consideration to receive seed funding. The government will provide free cloud services to each participating team.

Participants are encouraged to participate in hackathons to get a headstart in conceptualizing ideas and prototypes. Apps that are developed from these hackathons can be submitted to Apps4SG.

Health Up! - May 2013

Environment Up! - April 2013

Apps4SG Hackathon - June 2013

Workshops on app development and government data will be organized for participants to attend.

Register your interest with us and be kept informed! http://www.data.gov.sq/apps4sq/reg.aspx

Submission deadline: October 1, 2013.

OGC Student Spatial App Challenge sponsored by Google

The Open Geospatial Consortium (OGC) is challenging students who have software development skills to create new applications that use OGC standards in innovative, interesting and fun ways. For example, the software application can do some or all of the following:

- Mash up data from a variety of existing geospatial Web services that provide location data
- Provide access to new sources of location data (including, for example, sensors, computer models, webcams, 3D urban models, mobile devices, or spatial databases) to support innovative applications.
- Provide access to original new Web services that provide processing capabilities for innovative applications that use new or existing location data.

The three applicants to the OGC Student Spatial App Challenge that best satisfy the competition criteria will receive an award and the opportunity to have their apps featured on the OGC website and in other media channels. In addition, the first place winner will:

- Be sponsored by OGC to receive an award in front of the OGC membership at a quarterly OGC Technical Committee meeting.
- Have a dedicated award page on the OGC website featuring the winning application.
- Be cited in an OGC press release acknowledging the award.
- Receive a Nexus Tablet donated by Google.
- Receive, for the student's academic institution, a two-year OGC membership or two-year free renewal if the institution is an existing member.

The estimated total value of the prize to be awarded is \$1,500 plus round trip travel to the winner's selected OGC TC meeting. The OGC Map App challenge is open to any university student at the undergraduate or graduate level who is enrolled part or full time as of July 15, 2013. Submissions to the challenge are by individual only. Submitters must be 18 years or older at the time of submission.

Applications must be submitted by midnight EST, July 15th, 2013.

OGC Press Release

Asia Geospatial Excellence Awards 2013

Nominations are invited for Asia Geospatial Excellence Awards 2013 under the auspices of Asia Geospatial Forum 2013 (Kuala Lumpur 24-26 September). The awards shall be conferred to the exemplary geospatial applications development, technology innovations and policies/programs in the region.

Submission Deadline: 30 June 2013

2013 IEEE Data Fusion Contest

Recently, the IEEE Geoscience and Remote Sensing Society announced plans for its **2013 Data Fusion Contest**. The Contest, which helps connecting students and researchers around the world, evaluates existing methodologies at the research or operational level to solve remote sensing problems using data from various sensors. The Contest is open not only to IEEE members, but to everyone, and consists of two parallel competitions: Best Paper Award and

2013 IEEE GRSS Data Fusion Contest

BY VESTING MORROW

Res of the Contest of the

For registration details.

Best Classification Award. The winning teams will receive an iPad, an IEEE Certificate of Appreciation, and a free open access publication in an IEEE GRSS Journal. Final results will be announced at the 2013 IEEE International Geoscience and Remote Sensing Symposium in Melbourne, Australia, in July 2013. Thanks to AnyGeo blog



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

Source: Geospatial World and SLA press release

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Employment Opportunities

Director CRCSI, New Zealand

In 2009, Land Information New Zealand established the New Zealand node of the Cooperative Research Centre for Spatial Information (CRCSI), an Australian-based collaborative joint venture. Funded in part by the Commonwealth government, the CRCSI works with industry, government and academic sectors to produce business outcomes and benefits for its participants. The role of Director CRCSI New Zealand is to coordinate a wide range of research and development activities across a growing membership base in New Zealand. As Director CRCSI you will be accountable for:

- Leading the cross-sector development and implementation of a New Zealand Geospatial Research Strategy
- Establishing and nurturing relationships within the New Zealand spatial information community and between Australian and New Zealand agencies
- Identifying and promoting opportunities for New Zealand entities to contribute to, and benefit from, CRCSI activities
- Collaborating on project formulation and execution and identifying and managing any associated risk **Application Close Date: 14-Jun-2013. Position Description**

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

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Conference Proceedings

Australia: AURIN Training Update

Between the 1st and 3rd of May over 35 participants representing 15 partners agencies took part in a training and information session on the <u>Australian Urban Research Infrastructure Network</u> (AURIN) <u>portal</u> and demonstrator projects conducted as part of the North West Melbourne Data Integration Project. This project has been delivered through the Centre for Spatial Data Infrastructures and Land Administration and jointly funded by the Australian National Data Service (ANDS) and AURIN.

Click <u>here</u> to view the latest Demonstrator video, showcasing the latest eTools and data available through the AURIN Portal.

3D Malaysia 2013

The First 3D Malaysia 2013 conference with the theme "3D Data for Sustainable Development" was jointly organized by DES Mapping and Intermap, USA. in Parkroyal Kuala Lumpur on January 22nd. Over 120 participants from relevant Government agencies, private sectors and academia attended the event.

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The one-day seminar showcased innovative technology and application using NextMap Malaysia – out of the box high resolution 3D terrain data for Malaysia, in addressing the challenges of National Development such as Infrastructure development, Natural Resource Management and Disaster Management. The keynote addresses by JUPEM, DES and Intermap were highly informative and educational.

Modernization of land administration and management systems Uganda: 17-18 January 2013



Implementation of land information systems (LIS): sharing experiences, innovations and good practices.

Throughout the two day conference, discussions focused on technical issues related to the choice of the solutions adopted, the methodologies to be implemented and the technical equipment installed. Other topics included issues of protection against hacking, the importance of training local people, the communication targeting administrative staff and the public, and the importance of measuring concrete benefits of such projects and their returns on investment. Several presentations

focused on the use of aerial photography or satellite imagery in cadaster projects. As the cost of a geographic dataset depends heavily on its accuracy, it is essential to define the data sources that will be used for the establishment of the cadastral reference from the start.

Picking up a key point of discussion on the theme of the added value of NSDI projects for developing countries at the regional conference IGN France International held in April 2012 in Ouagadougou (Burkina Faso) the link between land projects and National Spatial Data Infrastructure (NSDI) was also addressed. Land projects are sometimes considered the cornerstone of NSDI initiatives. However the situation varies considerably from one country to another. Clear links exist between LIS projects and NSDI initiatives; however, some countries initiated NSDI projects without systematic land initiatives, while others have taken advantage of LIS projects to develop national spatial data infrastructure.

Most agreed that the highest authorities must play a determining role in the definition of public policies legal frameworks and the way these projects move forward. Without this strategic vision, both LIS and NSDI projects encounter difficulties fail to get off the ground or are not become sustainable. The completion of a geographic data set appears to be an essential component for both LIS or NSDI projects and should be taken into account from the very beginning.

In her final intervention, the Minister of Lands insisted on the added value of the LI project led by IGN France International. Securing land titles will reduce poverty and enhance economic development in Uganda. More details on the regional conference and the programmes will be available at: www.lis-uganda.go.ug and at www.ignfi.com

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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
June 2013		
3-6 June	Las Vegas, USA	Hexagon 2013 Conference
		For more information, contact: <u>Angelique Ortega</u>
8 – 9 June	San Francisco,	State of the Map - US
	USA	Workshop – June 7 and OSM Hack Day – June 10
10 June	Colombo,	Sri Lanka Geospatial Forum
	Sri Lanka	



12-13 June	New Delhi, India	Geointelligence India 2013
19 – 21 June	Manila, Philippines	14th Annual Global Development Conference
23-25 June	Tainan, Taiwan	3rd International Conference on Earth Observations and Societal Impacts (ICEO&SI)
24 – 27 June	Ho Chi Minh City, Vietnam	Eighth International Conference on "Geographical Analysis, Urban Modeling, Spatial Statistics" GEOG-AND-MOD 13 in conjunction with The 2013 International Conference on Computational Science and its Applications (ICCSA 2013) Submission - papers should be submitted at: http://ess.iccsa.org/ [please don't forget to select "Geographical Analysis, Urban Modeling, Spatial Statistics GEOG-AND-MOD 13" workshop from the drop-down list of all workshops.] Important dates 31 January 2013: Deadline for full paper submission 10 March 2013: Notification of acceptance 6 April 2013: Deadline for Camera Ready Papers June 24-27, 2013: ICCSA 2013 Conference
24 – 27 June	Ho Chi Minh City, Vietnam	International Workshop on Agricultural and Environmental Information and Decision Support Systems (AEIDSS 2013) in conjunction with The 2013 International Conference on Computational Science and its Applications (ICCSA 2013) Deadline for Full Paper submission: extended to February 1, 2013 Notification of Acceptance: March 10, 2013 Workshop description: Monitor and manage sanitary risks, study climate change, environmental impacts in connexion with agricultural practices (the use of pesticides, for example), mapping the good ecological status of rivers, simulate spread of forest fires are environmental and agricultural challenges for which Information and Decision Support Systems represent effective solutions. New theoretical and technical challenges emerge from the integration of several scientific domains such as agronomy, mathematics, information technology and computer science. The objective of the proposed workshop is to show how the latest advances in research in information and decision-support systems can be applied to environmental and agricultural matters. Information and Decision Support Systems topics (include but are not limited to): * Database, Data Warehouses * Geographic Information Systems * Cloud/Grid Computing * Distributed information Systems * Data Integration * Geovisulization Knowledge management * Spatial Big Data * Geosensor network * Software Engineering * Data Mining Proceedings and Journal special issue: Accepted papers of the Workshops will be included in a Springer-Verlag Lecture Notes in Computer Science (LNCS) volume. Selected papers will be invited to submit extended versions to a special issue of the Ecological Informatics journal.



24-26 June	Washington, DC, USA	GIS for Government: Addressing the Challenges of Funding and Interoperability
25-27 June	Vienna, Austria	RIEGL LIDAR 2013
July 2013		
2 – 5 July	Salzburg, Austria	GI Forum 2013 – Creating the GISociety The international GI Forum attracts an interdisciplinary audience interested in discussing progress and new ideas in GIScience. The GI_Forum communicatesinnovative research and learning in Geographic Information Science with focus on hardware, software, orgware and brainware for the GISociety, and their interrelationships. Young researchers are especially invited to contribute and discuss their research. Together with recognized scientists they will find a vibrant community from academia, business, and education ready to embrace new ideas and explore new research directions. GI Forum runs concurrently with the highly regarded German language conference on Applied Geoinformatics – AGIT. The two symposia share some 1200 participants, the innovative AGIT EXPO exhibit and stimulating social events. Submission deadline February 1, 2013.
8-12 July	San Diego, USA	Esri International User Conference
16 – 18 July	Gold Coast, Australia	IGNSS 2013 The International Global Navigation Satellite Systems (IGNSS) Society Inc. is pleased to announce IGNSS 2013 Closing Date for Submission of Abstracts: Monday 4 th February, 2013: Information regarding on line submission of abstracts and abstract templates will be updated in due course on the IGNSS Society website Submission of Peer Reviewed and Non Peer Reviewed Papers: Information regarding On Line Submission of Peer Reviewed and Non Peer Reviewed Papers will be updated in due course on the IGNSS Society website (Click here). IGNSS Free Membership: There is no fee to register for Membership of the IGNSS Society. Complete the On Line Membership Form Benefits of Membership include reduced Symposium Registration Fees. Contact: http://www.ignss.org/
21 – 26 July	Melbourne, Australia	Symposium (IGARSS) On behalf of the IEEE Geoscience and Remote Sensing Society and the IGARSS 2013 Local Organising Committee, we are delighted to invite you to Melbourne, Australia for IGARSS 2013. We are looking forward to welcoming leading scientists, engineers and educators from the diverse disciplines that make up the Geoscience and Remote Sensing community. We also hope to attract new delegates from the Asia-Pacific and Oceania regions. We will be offering a world class technical program encompassing traditional IGARSS topics and new topics reflecting the theme of the 2013 Conference, "Building a Sustainable Earth through Remote Sensing". This theme was selected to emphasize the issues that most affect the Earth's environment, and the human impact on the planet. We welcome both seasoned and new delegates to Melbourne in July 2013.
22-24 July	Mountain View, California, USA	Geo for Higher Ed Summit What: Geo for Higher Ed Summit When: July 22-24, 2013, deadline to apply has CLOSED. Where: Google Headquarters, Mountain View, California



		This special 3-day, hands-on technical workshop is designed for mapping and technology instructors and researchers in higher education institutions, who are actively working on projects related to mapping. To find out more and apply, visit. Details: Google will be hosting a special three-day hands-on technical workshop at the Googleplex in Mountain View. This Summit will bring together instructors and researchers in GIS and remote sensing technologies from higher education institutions. You will connect with Google instructors and engineers, and get resources for using these tools in your research and teaching. Cost: Attendance is free, following acceptance into the workshop through Google's application process. Breakfast and lunch on these 3 days will be provided free to participants.
August 2013		
26-29 August	Kuching, Sarawak, Malaysia	The 8th International Symposium on Digital Earth (ISDE8) with the theme of "Transforming Knowledge into Sustainable Practice" will be held in Kuching, Sarawak, Malaysia.
30 August - 1 September	Beijing, China	International Conference 2013 on Spatial Planning and Sustainable Development Abstract deadline closed: 15 April 2013.
September 2013		
2013 2 – 4 September	Jakarta, Indonesia	UN/Indonesia Workshop on Climate Change United Nations/Indonesia International Conference on
"AMENDED & UPDATED"		Integrated Space Technology Applications to Climate Change Application deadline: May 31, 2013 The United Nations is organizing the United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change under the framework of the United Nations Programme on Space Applications. The Conference will be hosted by Indonesia's National Institute of Aeronautics and Space (LAPAN). This conference will bring together experts from the space and the climate change community as well as decision makers to discuss methods to use space-based applications to support the identification and implementation of adaptation measures, as well as to share experiences and lessons learned on the use of such applications in the context of mitigation. The objectives of the Conference are: 1) To discuss ways in which countries affected by climate change can make better use of space applications to assess vulnerability to climate change. 2) To identify potential alternatives in the context of mitigation and adaption to climate change 3) To improve synergies among space agencies and organizations targeting efforts on climate change. 4) To strengthen international and regional cooperation in this area. 5) To raise awareness on the recent advances in space-related technologies, services and information resources which can be use to assess the impacts of climate change and the effects of measures implemented to reduce such impacts. Applicants must have a well-established professional working experience in a field related to the theme of the Conference. Applicants should ideally be involved in the planning or implementation of relevant space programmes in relevant governmental organizations, international or national agencies, non-governmental organizations, research or academic institutions



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		or industry. Within the limited financial resources available to the co-sponsors, a number of qualified applicants from developing countries, who have expressed the need for financial support will be offered financial support to attend the Conference. This may include the provision of a round-trip air ticket between Jakarta and the applicant's international airport of departure and daily subsistence allowances to cover board and lodging for the duration of the Conference. En-route expenses or any changes made to the air ticket must be the responsibility of the participants.
7-19 September	Tehran, Iran	ISNET/ISA Workshop on Space Applications for Disaster Risk
"NEW"		Reduction and Management Application deadline: June 30, 2013
		 The objectives of the Workshop are: To provide participants with a broad overview of space-based technologies for disaster risk reduction and management To provide specialized training in the processing, interpretation and applications of satellite remote sensing data for disaster risk reduction and management To impart hands-on training on floods, earthquakes, landslides, cyclones, tsunamis and avalanches using space-derived optical, SAR and microwave remote sensing data To impart knowledge on the use of advanced disaster risk reduction and management techniques and methodologies in handling space-derived data To develop familiarization with techniques used to integrate optical and SAR data for applications in different disaster hazard areas To enhance horizontal cooperation and collaboration among the participants through the development of synergy Applicants must have a professional background of working in the fields of satellite image processing, interpretation and analysis, disaster management applications especially floods, earthquakes and landslides. Applicants should ideally be involved in the areas of space technology applications for disaster risk reduction and management particularly on early warning, prevention, response and mitigation in space agencies, disaster management authorities and other space-related organisations. Those with the knowledge and working experience of optical, SAR/microwave remote sensing data processing and interpretation would be given preference. Postgraduate students who are in the second phase of their studies in disaster management area or Ph.D. fellows who are in the starting phase of their studies are encouraged to apply. ISNET will offer full/partial funding to a limited number of deserving applicants from OIC member states only. This will include the provision of a round-trip air ticket between Tehran and the applicant's international airport of depar
		Incomplete application forms shall either be returned or not be
12-14 September	Enschede, NL	entertained depending upon the date of receipt. GISDECO: URBAN FUTURES. Multiple visions, paths and constructions Deadline for abstract submission: 15 April 2013
	<u> </u>	



		Notification of acceptance: 15 May 2013 Deadline full paper submission: 15 August 2013? The upcoming GISDECO (GIS for Developing Countries) conference is being hosted by the Department of Urban and Regional Planning and Geo-Information Management (PGM) (Faculty ITC, University of Twente) and jointly organized with N-AERUS (Network-Association of European Researchers on Urbanisation in the South).? CALL FOR PAPERS Some pre-conference workshops/meetings can be arranged for a small fee can also be facilitated. Should there be a desire for these please contact the local organization committee before 31 March 2013. For any further information or communication regarding the conference please only use this email.
23-27 September	TSUKUBA, Japan	ASPAR 2013 The 4th Asia-Pacific Conference on Synthetic Aperture Radar "Overcoming the Hardships: Responding to Disasters with SAR"
24-26 September	Kuala Lumpur	Asia Geospatial Forum 2013 CALL for ABSTRACTS Contact Abstract Submission Abstract Acceptance Authors' Registrations 30 June 2013
October 2013		
15 – 17 October	Coombe Abbey, Warwickshire, UK	1st call for papers for the 9th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires. The workshop is organised by the University of Leicester with support from the Laboratory of Forest Management and Remote Sensing, Faculty of Forestry and Natural Environment, Aristotle University of Thessaloniki. Contact EXTENDED deadline for abstract submission is 15 April 2013.
November		
4-8 November	Addis Ababa, Ethiopia	GSDI 14 and AfricaGIS 2013: The GSDI Association, EIS-Africa, the International Geospatial Society, and the United Nations Economic Commission for Africa (UNECA) are pleased to announce a close partnership in offering the joint GSDI 14 World Conference and AfricaGIS 2013 Conference. The theme of the conference is Spatially Enabling Africa in Support of Economic Development and Poverty Reduction. IMPORTANT DATES Deadline for Submission of Abstracts:15 May 2013 Deadline for Submission of Full Papers for Refereed Outlets: 15 May 2013 Deadline for Submission of Full Papers for Non-refereed Outlet: 1 Sept 2013 Deadline for Full Conference Registration Payment for All Presenters: 15 Sept 2013
December		
2013 16–19 December "NEW"	Ahmedabad, India	AGSE 2013 - "Geospatial Momentum for Society and Environment" Organizers: - Dr. Anjana Vyas (CEPT University, India) Dr. Josef Behr (Stuttgart University, Germany)



		Important Dates Last date of Abstract Submission: 20 th June 2013 Last date of Full Paper Submission: 07 th September 2013 End of Early Bird Conference Registration: 31 st September 2013 Contact
2014		
	Malaysia	Malaysia will be hosting the (International Federation of Surveyors) FIG Congress in 2014. The decision was taken at the recently concluded FIG Congress 2010 in Sydney, Australia.

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