

GSDI Association Annual Report

January to December 2014

946 Great Plain Ave. PMB-194, Needham, MA 02492-3030, USA - www.gsdi.org

Introduction and Overview

Membership

The Global Spatial Data Infrastructure Association (GSDI) currently has 38 members from national and regional associations, government agencies, academia and private industry, from 20 countries, including 4 regional (transnational) organizations and the UN ECA. The individual members' arm of GSDI, the International Geospatial Society (IGS), has over 440 individual members from 55 countries. As part of the new GSDI Strategy and Strategic Plan 2015-2020, adopted by the Board in October 2014, IGS members will be brought more fully into the main Association membership and during the first quarter of 2015 the IGS 'brand' will be dropped.

Global Alliances

GSDI has representation on both the UN GI Working Group (UNGIWG) and UN Global Geographic Information Management (UN-GGIM) initiatives, promotes the open data principles of GEOSS, and is involved in SDI capacity building activities in many developing nations via its Small Grants Program. In May 20145, the Association achieved 'special consultative' status with ECOSOC at the United Nations, who lead on UN-GGIM. Since then, several GSDI members and officers have attended various global and regional meetings of the UN-GGIM initiative.

GSDI are members of the Joint Board of Geospatial Information Societies (JBGIS) and have Memorandums of Understanding (MoUs) with the International Cartographic Association (ICA), the International Federation of Surveyors (FIG), the International Society for Photogrammetry and Remote Sensing (ISPRS) and the Disaster Management and Public Safety Centre (DMPSC) at Univ. of Melbourne, for joint promotion of activities. The MoU with DMPSC was entered into in the final quarter of 2014 and two further draft MoUs have been prepared for discussion with the Open Source GEO Foundation (OSGeo) and the International Society for Digital Earth (ISDE), which should take effect in the first quarter of 2015.

Administering the Association

Administration and operation of the Association is accomplished by a small number of partpaid staff and the GSDI Executive Committee (President, President-elect and Past President) supported by Board members. During 2014, the post of Executive Director was assumed by the President, Dr. David Coleman, as permitted in the Bylaws, as then Executive Director, Prof. Harlan Onsrud, assumed the new role of Secretary-General. In October 2014, Roger Longhorn assumed the role of Secretary-General, while continuing to carry out his duties as Operations and Communications Manager, posts introduced in 2013 to support the Executive Director.

A Membership Recruitment Manager was appointed on a part-time basis in March 2014, but left to assume a new full-time contract elsewhere in May. Since then, the Secretary-General has assumed membership management and recruitment duties.

The final part-paid post introduced in 2014 for the Association was for the Regional Newsletter editor, Kate Lance, who also maintains the GSDI events calendar and webinar list on the website and provides cover for all regional discussion forums. Regional newsletters from Africa, Asia-Pacific and Latin America & Caribbean were combined into on new all-encompassing GSDI Regional Newsletter in April 2014, which now also includes news from



Europe, North America, Middle East and India. The change was undertaken to reduce cost of newsletter publishing while maintaining regional SDI-related news coverage (see statistics below).

Project Activities

Project work of the GSDI Association was historically accomplished via four Committees, whose Chairs and membership are drawn from within the membership. These are:

- (a) Legal and Socioeconomic Committee developed GLIM (Geo Legal Interoperability Map of the world http://evetion.nl/license/). Work to extend the coverage (content and geography) of GLIM will continue in 2015 as the GLIM Project for which budget has been allocated in 2015.
- (b) Societal Impacts Committee continued to support the Small Grants program (see below).
- (c) Outreach and Membership Committee most planned actions were undertaken by the Communications and Operations Manager, later Secretary-General, Roger Longhorn, including membership recruitment. (See also News and Newsletters below).
- (d) Technical Committee was inactive in 2014.

From 2015, the existing Committee structure will be phased out (except where provided for in the Bylaws) and individual Projects will be prepared, led by named Project Leaders. These will produce well-specified outputs for identified target audiences, and will focus on capacity building, SDI research and raising global awareness for SDI implementation challenges and solutions.

Mission of the GSDI Association

GSDI exists to promote international cooperation and collaboration in support of local, national and international SDI developments that will assist members to better address social, economic, and environmental issues of pressing importance in their nations. The mission of the GSDI Association is:

- to serve as a voice for those in the global geo community involved in developing, implementing and advancing spatial data infrastructure concepts at local, national, regional and global levels,
- to foster spatial data infrastructures that support sustainable social, economic, and environmental systems integrated from local to global scales, and
- to promote the informed and responsible use of geographic information and spatial technologies for the benefit of society.

Activities of the GSDI Association

The primary activities of the GSDI Association are:

- to support implementation and expansion of harmonized local, national, and regional SDIs that are globally interoperable, through capacity building and knowledge gathering and sharing (via the GI Knowledge Network);
- to foster international communication and collaborative efforts for advancing SDI innovations and concepts via our global and regional monthly newsletters, website, workshops and conferences,
- to support interdisciplinary research and education that advances SDI concepts, theories and methods via publications and the world conference series, and
- to promote the ethical use of, and access to, geographic information held by government in support of open data initiatives globally.



Outreach, Networking and Capacity Building Update

The Global Conferences

Our main outreach and networking activities include the GSDI World Conferences, the monthly global and regional newsletters, and support to SDI activities in developing nations via the GSDI Small Grants Program. From 2015, the world conferences will be supplemented by regional conferences or meetings at which members can network and participate in capacity building activities, typically held in parallel with other major geo-related conferences or meetings, and in cooperation with member organisations or our MoU partners.

The **GSDI World Conferences** are typically held in partnership with another national, regional or international GIS-/SDI-related conference, in different parts of the world, approximately every 18 months. The conference series started in 1996 in Bonn, Germany, and has a continuously successful track record ever since (see www.gsdi.org/gsdiConferences), bringing together thousands of government staff, academics, researchers, consultants, geomatics industry vendors and SDI implementation practitioners from across the world.

The Global Geospatial 2013 Conference, incorporating GSDI 14 and AfricaGIS 2013, was held in Addis Ababa, Ethiopia, at the UN Economic Commission for Africa (UN ECA), a valued GSDI member. (See www.gsdi.org/gsdi14/). The conference comprised seven plenary sessions and more than 170 presentations were made in multiple parallel sessions at the UN Conference Centre, with participants from 60 countries, and was recognised as one of the largest geospatial conferences held in Sub-Saharan Africa over the past two decades. Papers are published in extended form in both peer-reviewed and non-peer-reviewed publications, accessible from the GIKnet Spatial Document Depot and/or directly from the conference web site (see http://www.gsdi.org/gsdiconf/gsdi14/prog_details.html). In addition to the technical programme, the new GEO AfriGEOSS initiative was officially launched at the conference.

Following a call for proposals, the *GSDI 15 World Conference* will be held in **Taipei from 7** – **11 March 2016**, maintaining the 18-month conference intersession period of past conferences. The hosts will be two of the Association's Taipei-based full organisational members plus several supporting national and regional geo-related organisations. Only two offers were received to host the conference, and the Executive Committee decided that the proposal from Taipei was best for the Association.

News and Newsletters

GSDI have published the **GSDI & IGS Global Newsletter** monthly since 2011. In 2014, 11 issues were published and distributed to the full GSDI Association mailing list (approximately 4500 addressees), with news about the Association and its members. Publication will continue into 2015, but via the news publishing facility of the new GSDI website. *During 2014, the Global Newsletter was also downloaded 3011 times (all 11 issues)*.

Three **SDI** Regional Newsletters were published monthly for Africa (since 2002), Asia-Pacific (since 2003), and Latin America & Caribbean (since 2004) regions. (See www.gsdi.org/newsletters). Due to financial restrictions, publication of three separate regional newsletters was replaced in April 2014 with a single **GSDI** Regional Newsletter covering the three regions above, joined by news from Europe, North America and Middle East and India. Kate Lance was appointed editor of the new combined Regional Newsletter, a post that continues in 2015. *During 2014, the new format Regional Newsletter was downloaded 5596 times (all 8 issues).* Translation into Chinese of the Asia-Pacific section of the new regional newsletter continues courtesy of our members on the Societal Impact Committee in Taipei.



New GSDI Website

From 2015, the newsletter format will change, with most news items being published as they are sourced directly to the new GSDI website, in a searchable manner, maintaining the 'regional' sections where appropriate. This will also apply to the Global Newsletter. It will still be possible for single (PDF) newsletters to be produced from the posted news items when necessary, i.e. for conference or meeting distribution or other promotional purposes.

E-mail Lists/Discussion Forums

Kate Lance also updates the five regional discussion forums, the GSDI online event calendar and the webinar lists, as well as monitoring membership news to aid in production of the Global Newsletter.

There are also active e-mail lists for all five global regions, including Europe and North America. Traffic on the lists during this reporting period included:

- Africa = 122 messages
- Asia-Pacific = 109 messages
- Latin America & Caribbean = 84 messages
- Europe = 100 messages
- North America = 74 messages

The message traffic spanned a wide range of topics and issues. The message archive can be seen by subscribing to the lists at http://www.gsdi.org/newslistarchive. The discussion lists are monitored by the News Editor.

Promotion and Social Media

Each month, the magazine GIM International publishes a one-page column in their print edition from articles submitted by GSDI Association members. These articles are also repeated in the 'Article of the Month' section of the GSDI & IGS Global Newsletter. Visit the Global GSDI & IGS Newsletters on the Newsletter section of the Association website to see these articles at: http://www.gsdi.org/newsletters.

GSDI also maintains an active LinkedIn group with 380 members at the end of 2014 – see: http://www.linkedin.com/groups/GSDI-Association-3794985. We also have a Facebook account at http://www.facebook.com/gsdiandigs and both outlets are used for announcements and news from either the Association or members. We have a Twitter account to which messages can be sent at Twitter @GSDI IGS.

For publicizing the news and presentations of staff and GSDI Members, we also maintain an account with ISSUU.com where all newsletters are published online in an electronic magazine format. This can also be used for publishing reports online. For presentations, we have a SlideShare account which currently hosts presentations from staff and committee members made at major meetings and conferences. This source will be expanded in 2015 with presentations from past conferences and future meetings.

Capacity Building

Since its launch in 2003, the **GSDI Small Grants Program** has supported more than 100 projects across the globe. Historically, the program has been sponsored through a partnership between the GSDI Association, the U.S. Federal Geographic Data Committee, and the GISCorps of URISA. Three types of awards are available: a cash award of up to US\$ 2500 per



project; SDI/GIS consulting services up to the value of US\$ 2500; or a combination of cash award and SDI/GIS consulting services. The consulting services are offered through the GISCorps.

Outcomes from past projects include convening national or sub-national seminars or workshops related to SDIs, producing SDI and earth observation system (EOS) related training manuals and modules, establishing metadata and clearinghouse nodes, establishing web mapping services and applications, accomplishing geodata and/or SDI surveys or inventories, producing and disseminating newsletters and awareness-raising materials about SDI, and drafting policy and legislation related to SDI.

Financial support in 2014 was provided by <u>GeoConnections</u>, a national collaborative initiative led by Natural Resources Canada. GeoConnections supports the integration and use of the Canadian Geospatial Data Infrastructure (CGDI), an on-line resource that improves the sharing, access and use of open geospatial information. The CGDI helps decision-makers from all levels of government, the private sector, non-government organizations and academia make better decisions on social, economic and environmental priorities. The infrastructure itself consists of data, standards, policies, technologies and partnerships that are in place to allow the sharing and visualization of information on the Internet. For more information, visit www.geoconnections.nrcan.gc.ca.

A Call for Proposals was issued in March 2014, resulting in 40 proposals from organizations in over 20 countries. The proposals were reviewed by volunteers from six continents and those selected to receive US\$ 2500 are listed below. In addition, the project from Ghana is receiving SDI/GIS consulting services through the GISCorps.

Establishing standards-based web mapping and data access services using open source geospatial software technologies for CERSGIS

Institution: Centre for Remote Sensing and Geographic Information Services (CERSGIS), University of Ghana, Legon

Project summary: The project is focused on the development of a clearinghouse for spatial data for CERSGIS and is a case study for the full-scale implementation of recommendations and activities for the National Spatial Development Framework for Ghana. Project activities include:

- Developing data policies and standards;
- Developing metadata for the datasets based on the defined standards;
- Implementing web-based spatial data infrastructure portal for public access to the datasets; and
- Presenting a workshop to the SDI portal to stakeholders.

Towards GIS Interoperability for Environmental Protection And Sustainable Development

Institution: Makerere University, Kampala, Uganda

Project summary: Develop a structured organization of geodata and geographic information based on internationally accepted OGC and ISO standards to guarantee interoperability in Uganda. Planned activities include:

- Evaluating the existing spatial datasets and value of geoinformation;
- Documenting spatial data according to the ISO 19115 standard; and
- Developing a one-stop gateway to discover, access and evaluate spatial data.

Developing a Reliable Agriculture GIS Database for Belize through Partnership with Key Stakeholders



Institution: Land Information Center, Ministry of Natural Resources and Agriculture, Belmopan, Belize

Project summary: Develop a reliable agriculture GIS database in collaboration with agriculture stakeholders in the country to:

- Establish an Agriculture GIS data integration working group consisting of key stakeholders from governmental, private sector, and other relevant stakeholders.
- Identify the types of agriculture related data and data gaps that exist for large farms (and commercial farms) within the country;
- Establish standards for data integration exercises based on identified needs of stakeholders, best practices, and international standards; and
- Develop and provide accessibility of the final database through the Belize NSDI geoportal to enable improved decision-making within this sector.

Introducing EnviroSDI for Armenia: Piloting Publicly Accessible Online Platform

Institution: Institute of Archaeology and Ethnography, National Academy of Sciences, Republic of Armenia

Project summary: The proposed project will create an online SDI open-source based platform (Ushahidi may be one option), enabling the non-profit sector and the wider public to access a wide range of geographic data including base maps and sector specific thematic maps. The main components of the project are:

- Designing the concept of the online SDI platform, with the specifics of it use (users) in mind;
- Developing (customizing an existing open-source platform) and rolling out the SDI (online);
- Populating it with base maps; and
- Populating the platform with geographic (environmental, conservation) thematic data collected during the field fieldwork over a pilot area.

The full range of projects supported by GSDI Small Grants can be seen at http://www.gsdi.org/sic1 along with the final reports submitted by the beneficiaries. The Association is actively seeking new funding to support the program for 2013 and beyond.

On-site GIS Training

Through Societal Impacts Committee vice-Chair, **Jeremy Shen**, in Taipei, the Association were able to provide a free training opportunity for three candidates from Latin America to attend the ICLPST (International Center for Land Policy Studies and Training) training Seminar on Geographical Information Systems and Land Management in Taipei.

Announcement of the third training opportunity to attend the 2014 ICLPST training seminar from 19 March to 1 April 2014 was made in November 2013 at the Global Geospatial Conference, and after reviewing the 29 applications submitted, the following GSDI or IGS member were selected by the Societal Impacts Committee members:

- Mr Ivar M. Ledezma Casablanca of Bolivia,
- Ms Rosario Casanova of Uruguay, and
- Mr Mathenge Mwehe of Kenya.

Finally, various GSDI members or staff continue to be actively involved in lecturing, conducting workshops or seminars for their organisations or for other members' organisations on a range of topics relevant to SDI implementation. The Association, in developing the new Strategic Plan 2015-2020 considered ways in which to develop our capacity building skills and expertise into deliverable course material that could lead to a Continuous Professional



Development (CPD) certification issued by the Association or in cooperation with another recognized certificate awarding body. Development of this activity continues into 2015.

SDI Implementation Support

Additional capacity building is provided via access to reports, studies and professional papers submitted to the spatial documents depot of the Geographic Information Knowledge Network (GIKnetwork - www.giknet.org), face-to-face geomatics training opportunities, webinars (http://www.gsdi.org/webinars) and videos offered by GSDI members (see: http://www.gsdi.org/sic3).

Individuals and organisations, including government agencies, can submit their profiles to the GIKnet Community Register, which also holds the profiles of all IGS members. Documents can be submitted to the Spatial Documents Depot, which currently holds more than 60 documents relating specifically to SDI implementation issues. Valuable papers are also available in the online Proceedings of all 13 GSDI World Conferences held since the first conference, in 1996 (Bonn, Germany), available at: http://www.gsdi.org/gsdiConferences.

Practical experiences for state / provincial / regional (sub-national), national and transnational SDI implementations are also recorded in GIKnet, although this is still very much a 'work in progress', with new data collection methods being investigated.

GI Community Registry Statistics as of 30 November 2014

Total Users Registered in GIKnet (2370)

Profiles registered:

- Individual Profiles (705)
- Company Profiles (30)
- NGO, Non-Profit, and Academic Profiles (26)
- Government Agency Profiles (166)
- Agency SDI Implementations Experiences (8)

Another key source of SDI implementation information is the **GSDI SDI Cookbook**, which is maintained as an online wiki, which is maintained under guidance of the GSDI Technical Committee, at http://www.gsdidocs.org/GSDIWiki/index.php/Main Page.

The International Geospatial Society

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

At the IGS elections for officers in spring 2013, *Sives Govender* (Executive Director, EIS-Africa) was elected President and *Dev Raj Paudyal* (Lecturer, University of Southern Queensland, Australia) was elected President-elect. Dev assumes the presidency on 1 January 2015. Mr Jeremy Shen was elected to the post of President-elect in elections held in September 2014.

Sives and Dev launched the 2014 IGS Member Survey in July seeking input from all Members on a range of topics and issues, to help focus the new GSDI strategy and identify high priority activities in the future work plan. A total of 227 (158 full responses and 69 incomplete



responses) valid responses were received in response to the Survey which was conducted between July 24 and August 18, 2014, resulting in an excellent response rate and valuable information from members on what activities they would like the Association to focus on in 2014-2015.

IGS Member Statistics

In June 2013, IGS had 280 members from 55 countries, and by the end of December 2013, membership had reached 380 members. Our goal was to achieve a membership of 500 by the end of 2014 and as of 30 November there were 440 Individual Members in the Association. Learn more about IGS at www.igeoss.org and follow IGS and GSDI news at www.gsdi.org.

IGS Brand to Cease in 2015

The GSDI Strategy 2015-2020 proposed dropping of the 'IGS' as a brand for the individual members in the Association. This was proving confusing to the memberships of the two different categories of member – Organisational and Individual – and also for supporters, especially potential funding bodies or sponsors. IGS never existed as a separate legal entity from the GSDI Association which also made for more complex administration of the membership. Existence of IGS within the structure of the Association and in the existing Bylaws was also found to be 'overly complex' when reviewed by legal experts and in comparison to the structures of like organisations.

Therefore, reference to IGS was removed from the proposed new draft GSDI Bylaws to be voted on by the Council at their first meeting in 2015. Following that, new 'GSDI Individual Member' membership certificates will be issued to all current individual members and will be offered to past members whose membership had lapsed in 2012-2013.

Support to Related Initiatives

Through its many different educational activities, the GSDI Association and IGS provide support to initiatives such as GEO/GEOSS, Eye on Earth and ISCGM by:

- (a) helping to prepare young professionals to participate in national and global geospatial initiatives that are underpinned by SDI developments,
- (b) providing a communications and collaboration platform for government and industry professionals working directly in SDI implementation, and
- (c) offering global networking and learning opportunities between students, young professionals and SDI experts in tackling geospatial harmonization and interoperability issues that are at the core of SDI implementation globally.

Report submitted by Roger Longhorn Secretary-General, GSDI Contact: rlonghorn@gsdi.org 31 December 2014



Annex I - GSDI Board Members and Committee Members as of December 2014

Official Board Members

- Borrero, Santiago PAIGH
- Coleman, David President
- Crompvoets, Joep Academia
- DeLoatch, Ivan Region North America
- Farah, Hussein Region Africa
- Lovell, Dave President-Elect
- McCormack, Bruce EUROGI
- Nonguierma, Andre UNECA-CODIST
- Paull, Dan Asia/Pacific
- Rajabifard, Abbas Past President
- Reichardt, Mark OGC, International Industry Organisation
- Stobl, Josef International Geographic Organisation
- Terborgh, Carmelle Industry Advisory Council
- Tillman, Stan Industry Advisory Council
- Ursin, Heli Region Europe
- van Praag, Eric Region South America
- Vinay, Sri GSDI Related Global Initiatives (replaced Mark Becker)
- IGS President Sives Govender
- Vacant position Non-profit organisations
- Al-Haidan, Khalid Ex-Officio (non-voting rights)

Additional Officers and Staff

- Marilyn Gallant Business Manager (title changed in 2013)
- Harlan Onsrud Secretary General (title changed in 2013)
- Roger Longhorn Operations and Communications Manager
- Roger Longhorn- Secretary-General (from Oct 2014)
- Kate Lance News Editor (from April 2014)

Committee Chairs

- Bastiaan van Loenen Legal and Socioeconomic Committee, co-Chair
- Joep Crompvoets Legal and Socioeconomic Committee, co-Chair
- Denise McKenzie Outreach & Membership Committee
- Carmelle Terborgh Societal Impacts Committee

Committee Vice-chairs

- **Societal Impacts Committee**: Juna Papajorgji, Jeremy Shen (Capacity Building), Brigitta Urban-Mathieux (Small Grants Program)
- Outreach & Membership Committee: Roger Longhorn (Communications & Membership), Sives Govender (regional Africa), Nancy Aguirre (regional Central & South America), Bruce Westcott (regional, North America), Tien-Yin (Jimmy) Chou (regional, Asia-Pacific), Joep Crompvoets (regional, Europe), Khalid al-Haidan (regional, Middle East & India).