



# Global Spatial Data Infrastructure

## Recent Developments and Future Challenges

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GSDI Association

# Global Spatial Data Infrastructure Association

... a global forum to support exchange of  
ideas and encourage joint activities at the  
global level

# GSDI Association Mission

- Serve as a point of contact and effective voice for those in the global community involved in developing, implementing and advancing spatial data infrastructure concepts,
- Foster spatial data infrastructures that support sustainable social, economic, and environmental systems integrated from local to global scales, and
- Promote the informed and responsible use of geographic information and spatial technologies for the benefit of society.

# 5 Main Goals

1. Continue to promote and develop awareness and exchanges on infrastructure issues for all relevant levels from local to global.
2. Promote and facilitate standards-based data access/discovery through the Internet.
3. Promote, encourage, support, and conduct capacity building.
4. Promote and conduct SDI development research.
5. Collaborate with others to accomplish its Vision and Goals.

# GSDI Association Activities

- Achieve International Data Access and Usability
  - Policy and Legislation
  - Universal (International) Licensing
    - Geographic Data Commons
  - Registries
    - Validation
    - Certification of Availability
  - Training and Capacity Building
  - Standards and Interoperability
    - Open Geospatial Consortium
    - International Standards Organization

# GSDI Association Activities

- Engage
  - Government
    - Funding
    - Develop bilateral donor agreements for developing nations
  - Academia
    - Policy research
    - Review international legislation on data policy
    - Develop protocols for registration
    - Training
  - Industry
    - Assist in building registries
    - Outreach to clients to engage their participation
  - Everyone
    - Register data catalogs
    - Register data and service offerings

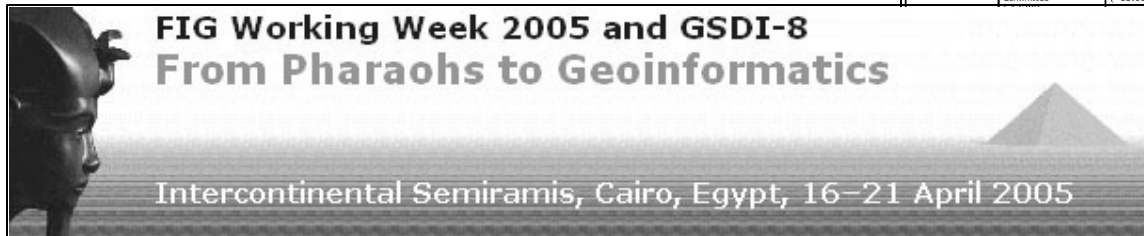
# GSDI-8 - Cairo

## April 16-21

[http://www.fig.net/pub/cairo/tech\\_programme.htm](http://www.fig.net/pub/cairo/tech_programme.htm)

- Joint meeting with FIG
- 900+ attendees
- 88 countries

	Fri April 15	Sat April 16	Sun April 17	Mon April 18	Tue April 19	Wed April 20	Thu April 21
08:30- 17:30		Registration	Registration	Registration	Registration	Registration	Registration
09:00-10:30	FIG Council Meeting GSDI Executive Committee	Pre-Conference Workshops (4) FIG ACCO Meeting GSDI Board Meeting	Pre-Conference Workshops (2) (Corporate Members) FIG General Assembly (09:00-13:00) GSDI Committee Meetings (3) (09:00-13:00) ISCGM Annual Meeting (08:00-13:00)	Plenary Session Opening of the Exhibition (10:30)	Plenary Session	Plenary Session	Parallel Sessions (2 + 1 for ISCGM) TS46-TS48 FIG President's Meeting (08:30-10:30)
11:00-12:30	FIG Council Meeting (-13:00) GSDI Executive Committee	Pre-Conference Workshops (4) FIG ACCO Meeting (-12:00)	Pre-Conference Workshops (2) (Corporate Members) FIG General Assembly (09:00-13:00) ISCGM Annual Meeting (08:00-13:00)	Parallel Sessions (5) TS1-TS5 Exhibition	Parallel Sessions (5) TS16-TS20 Exhibition (10:30- ) Technical Tours (10:30- )	Parallel Sessions (5) TS 31-TS35 Exhibition (10:30-14:00) Technical Tours (10:30- )	Parallel Sessions (2 + 1 for ISCGM) TS49-TS51 FIG General Assembly (11:00-14:00)
			GSDI Committee Meetings (3) (09:00-13:00) ISCGM Annual Meeting (08:00-13:00)	Parallel Sessions (5) TS6-TS10 Exhibition	Parallel Sessions (5) TS21-TS25 Exhibition Technical Tours	Parallel Sessions (5) TS36-TS40 Technical Tours	Closing Ceremony (14:30-16:30)
			Pre-Conference Workshops (2) (Corporate Members) FIG Commission Annual Meetings (10) (14:00-16:30) GSDI Council Meeting (13:00-16:30)	Parallel Sessions (5) TS11-TS15 Exhibition	Parallel Sessions (5) TS26-TS30 Exhibition Technical Tours	Parallel Sessions (5) TS46-TS50 Technical Tours	GSDI Board Meeting (17:00-20:00)
	Committee (-17:00)	(-17:00) GSDI Board Meeting (-17:00)	FIG Commission Annual Meetings (14:00-16:30) GSDI Council Meeting (13:00-16:30) Opening Ceremony (17:00-19:00)				
19:00-	FIG Council Dinner GSDI Executive Committee Dinner	FIG ACCO Dinner	Welcome Reception	Egyptian Evening / FIG Foundation Dinner	Free	Gala Dinner	



# Meetings

- **GSDI 1 Bonn, Germany** 4-6 Sept, 1996
- **GSDI 2 Chapel Hill, USA** 20-21 Oct, 1997
- **GSDI 3 Canberra, Australia** 17-19 Nov, 1998
- **GSDI 4 Cape Town, South Africa** 13-15 Mar, 2000
- **GSDI 5 Cartagena, Colombia** 21-24 May, 2001
- **GSDI 6 Budapest, Hungary** 16-19 Sept, 2002
- **GSDI 7 Bangalore, India** 30 Jan - 6 Feb, 2003
- **GSDI 8 Cairo, Egypt** 16-21 April, 2005
- **GSDI 9 Santiago, Chile** November 6-10, 2006



# Structure of GSDI Association

- Non-Profit Organization
- emphasis on inclusiveness and democratic processes

# Working Groups

- Technical Working Group
  - Chair: Doug Nebert
- Legal and Economic Working group
  - Chair: Bas Kok, Kate Lance
- Communications Committee
  - Chair: Mark Reichardt
- Membership
  - Chair: Harlan Onsrud
- Special Projects
  - Chair: C.J. Cote
- Conference Planning Committee
  - Chair: Alan Stevens

# Membership

- Full, associate and individual memberships
- Agencies (national to local), companies (all sizes), academic institutions, non-profits, individuals
- Dues scaled upon approximate ability to pay

# Board of Directors (18 - most elected)

- Officers - President, President-elect, Past President
- Sectors - Industry, Government, Academia, Non-Profit
- Regions - Africa, Asia/Pacific, Europe, N. America, S. America
- Permanent Regional Committees - Europe, Africa, Americas, etc.
- International & Global Organizations - International Geographic Org., GSDI Related Global Initiative, International Industry Org.
- Ex-Officio Members

# Ongoing Activities

- Newslist (news@gsdi.org - 1600 subscribers)
- Monthly Regional Newsletters - Africa, Latin America, Asia/Pacific (electronic)
- Working Groups - Technical, Legal & Economic, Standing Committees, etc.
- Email Discussion Forums
- Small Grants Program
- Annual Meeting plus Training Workshops
- Affiliated Projects: ESRI Global Map Grants, Intergraph Open Interoperability Grant Program

# GSDI Secretariat Support

Europe	EUROGI
US	FGDC International Programs
Asia	Indian Space Research Organization

# Regional Spatial Data Infrastructures

- European Umbrella Organization for Geographic Information
- Permanent Committee on GIS Information for the Americas
- Permanent Committee on GIS Infrastructure for Asia and the Pacific
- Permanent Committee on GIS Infrastructure for Africa

# GSDI involvement in global groups

- GEO Participant
  - <http://earthobservation.org>
- WSIS Participant
  - <http://www.itu.int/wsis/>
- ISO TC211 Class A Liaison
- CEOS WGISS Liaison
- Relationships with
  - OGC
  - International Society for Digital Earth
  - ISPRS



# Current Projects...

## Developing Spatial Data Infrastructures: **The SDI Cookbook**

Version 2.0  
2004

Release for Review at the Fourth Global Spatial Data  
Infrastructure Conference, Cape Town, South Africa



Editor: Douglas D. Nebert, Technical Working Group Chair, GSDI

*Disclaimer: This draft represents a work-in-progress that has been compiled from numerous contributions and available online documents contributing organisations. Full acknowledgement of contributions and citations will be provided in the initial public draft.*

Document Available  
At:

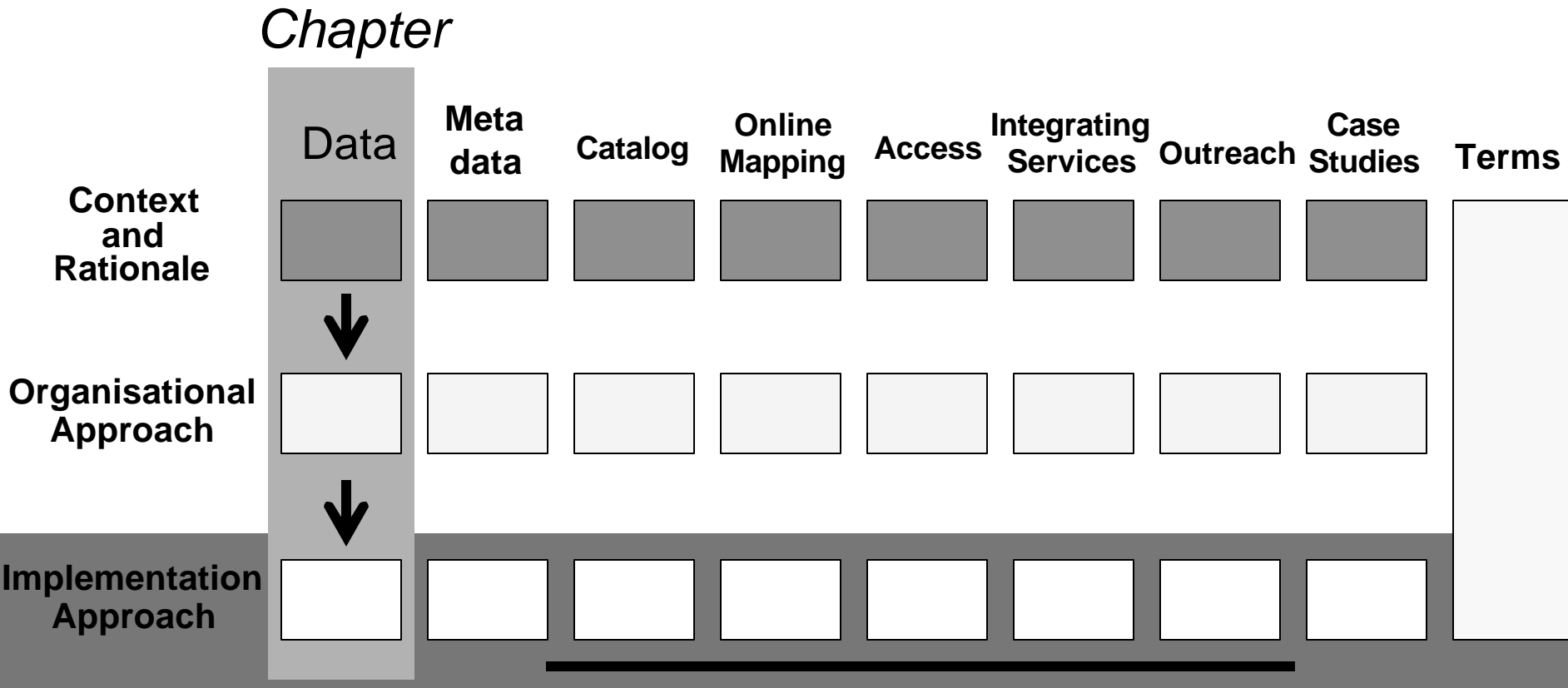
<http://www.gsdi.org>

# Current Projects...

## Cookbook - announcing version 2.0:

- Doug Nebert; Editor in Chief
- It contains contributions from many nations
- FGDC/GSDI will maintain it and make it available on the GSDI website
- It is a living document

# Cookbook Design Concept



# Current Projects...

## UDDI Registry

- connecting islands of interoperability
- creation of hundreds of catalogues of data and services is inevitable but difficult to navigate
- registry of all services at a global level is needed (experimentation: GSDI Industry Advisory Group - Geographic Gateway)

# Global Commons and Global Marketplace in Geographic Data

- redirect technological and legal approaches towards providing incentives for sharing locally collected data and enabling sharing
- new conceptual approach
- See  
<http://www.nap.edu/catalog/11079.html>  
<http://www.spatial.maine.edu/geodatacommons>

# Members

- Addis Ababa University, Ethiopia
- Atlantic Institute, US, Canada
- CIESIN - Columbia University, US
- UN Committee on Development Information (CODI)-Geo
- Delft University of Technology, Netherlands
- Department of Science and Technology, India
- EIS-AFRICA, South Africa
- ESRI, Commercial
- Eurogeographics, Europe
- European Umbrella Organization for Geographic Information (EUROGI)
- Federal Geographic Data Committee (FGDC), US
- GISPOL - National Land Information System Users Association, Poland

# Members

- Hungarian Association for Geo-information (HUNAGI)
- Indian Space Research Organisation Headquarters
- Institut Cartografic de Catalunya (Associate), Spain
- Intergraph Mapping and GeoSpatial Solutions, Commercial
- International Society on Digital Earth, China/Int'l
- ITC International Institute for Geo-Information Science and Earth Observation, Netherlands
- IGM (Military Geographic Institute of Chile)
- Leica Geosystems, Commercial
- National Geographic Information Infrastructure Programme, Survey Department, Nepal
- National Geospatial-Intelligence Agency, US
- National Land Survey of Finland
- National Resources Canada
- National Space Research and Development Agency (NASRDA), Nigeria

# Members

- National Spatial Data Centre, Malawi
- National University of Lesotho
- Open Geospatial Consortium, Int'l
- Pan American Institute of Geography and History (PAIGH)
- Regional Centre for Training In Aerospace Surveys (RECTAS), Nigeria
- Spatialnetworks Pvt. Ltd. (Associate), India
- State Bureau of Surveying and Mapping of China (SBSM), China
- University College of Lands and Architectural Studies (UCLAS), Tanzania
- University Consortium for Geographic Information Science (UCGIS), US
- University of Zimbabwe



# What do we want to keep doing.....? .... or do better?

- Expand our membership
- Work with current partners to leverage talents, resources, and impact
- Seek new partners to do same
- Spice-up the Newsletter and expand awareness

# What do we want to keep doing.....? .... or do better?

- Improve the Cookbook
  - Enhance the case studies
- Small grants
  - Attract partners to leverage resources
  - Broaden impact
- Provide services
  - Geo-Portal
  - Web -- applications

# Encourage capacity building

- Conduct SDI awareness training
- Facilitate the sharing of information
- Collect case examples of best practices
- Provide on-site support as requested for hands-on work
- Conduct follow-up activities/incentives
- Establish a knowledge infrastructure

# Promote and conduct SDI development research

- Stimulate the academic community to conduct research relating to SDI development
- Maintain an online SDI library of reference material
- Implement a small grant program in support of SDI research
- Facilitate networking of SDI researchers around the world

What do we want to keep doing.....?  
.... or do better?

*Be seen as the focal point for  
Global Spatial Data  
Infrastructure information and  
help*

# Additional Information

<a href="http://www.gsdi.org"><u>www.gsdi.org</u></a>	<b>Global Spatial Data Infrastructure</b>
<a href="http://www.eurogi.org"><u>www.eurogi.org</u></a>	<b>European Umbrella Org. for Geog.</b>
<a href="http://www.pcgiap.org"><u>www.pcgiap.org</u></a>	<b>Permanent Committee For Geog. Info. for Asia and the Pacific</b>
<a href="http://www.cpidea.org.co"><u>www.cpidea.org.co</u></a>	<b>Permanent Committee For the Americas</b>
<a href="http://www.codigeo.org"><u>www.codigeo.org</u></a>	<b>Permanent Committee For Africa</b>
<a href="http://www.opengis.org"><u>www.opengis.org</u></a>	<b>Open GIS Consortium</b>
<a href="http://www.fgdc.gov"><u>www.fgdc.gov</u></a>	<b>Federal Geographic Data Committee</b>