

Towards a GEOSS Stakeholder Network for Science and Technology

*In support of developing GEOSS as a utility for
Earth sciences in service of society*

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Brief History:

- EGIDA Project initiated the EGIDA Stakeholder network;
- First Workshop held on May 9-11, 2011 in Bonn, Germany;
- Main Conclusion: The Network should be a GEOSS S&T Stakeholder Network with continuation after the EGIDA Project ends.

What should be the role of the GEOSS S&T Network in the post-STC time?

Communication platform focused on S&T as they relate to GEOSS and the societal benefits of Earth observations.

Goals for the GEOSS S&T Stakeholder Network:

- Originally: Support the Implementation of GEO's S&T Road Map:
 - Facilitate the science and research needed to build GEOSS;
 - Promote GEOSS in S&T communities;

Is there something missing?

- Facilitate the science and technology needed to utilize the benefits of Earth observations:
 - respond to the needs of science and research;
 - support the development of decision support tools.

Example: Risk-based Planning



Who should be represented in the GEOSS Stakeholder S&T Network?

The GEO S&T Road Map details two Activities:

- Actively engage and incorporate S&T participants in developing GEOSS;
- Create incentives and promote GEO in S&T communities

We have identified a third activity:

- Facilitate the science and technology required to utilize the societal benefits of GEOSS and Earth observations

EGIDA SN Member- ship

Organization	Contact Point	Country/Region	Projects/Programmes
Advanced Industrial Science and Technology	Satoshi Sekiguchi	Japan	GEO Grid, GEOSS SIF
Bulgarian Academy of Sciences; Geophysical Institute "Acad. L. Krastanov"	Kostadin Ganev	Bulgaria	"iSOIL": Interaction between soil related sciences — Linking geophysics, soil science and digital soil mapping ; "TRANSFER": Tsunami Risk AND Strategies For the European Region; "SEC-GRID": eInfrastructure for regional eScience
Commissione Oceanografica Italiana	Giuseppe Manzella	Italy	Intergovernmental Oceanographic Commission
CSIRO	Stuart Minchin	Australia	STC, CRSS, IEEE GEOSS Workshop
CNRS/INSU	Patrick Monfray	France	IGFA, EUR OCEANS, GMES
Austrian Environment Agency (EAA)	Herbert Haubold	Austria	GAC, GNU, GSE, MACC, PROMOTE, Geoland I, GSE Land, LISA
ERAWatch	Aris Kaloudis	EC	proVISION, GMES
Institut Cartogràfic de Catalunya	Jaume Miranda	Spain	EUREF, INSPIRE, CS PCOT, CS IDEC
Instituto Nacional de Pesquisas Espaciais	João Vianei Soares	Brazil	CBFRS, GFO CRC
National Centre of Geographic Information/National Geographic Institute	Sebastián Mas-Mayoral	Spain	Spanish SDI, INSPIRE
Research Council of Norway	Kirsten Broch Mathisen	Norway	Global Change Committee
South African National Space Agency; Department of Science and Technology	Val Munsami	South Africa	GEOS/GEOSS co-chair STC
IEEE South Africa Section	Saurabh Sinha	South Africa	GEO/GEOSS
Tsinghua University	Jiming I Iao	China	Global Monitoring Plan for Atmospheric Mercury
TÜBITAK	Tamer Özalp	Turkey	National/Space Research Programme, Public Research Programme, TR-GRID
University of Belgrade; Faculty of Mining and Geology	Ivana Vasiljevic	Serbia	RESTCA-TERCE-NIPMSS, SourceSink, "Sustainable Aggregates Resource Management", CC-WaterS
Universität Bonn	Michael Nynhuis	Germany	GEOSS studies, EUCENE, Analyst of the GEO's Societal Benefit Area "Weather"
University of Nevada, Reno	Hans-Peter Plag	USA	GEO STC, Point of Contact of GEO Task ST-09-02

Actively engage and incorporate S&T communities in developing GEOSS

Activity:

1a Revolving scientific review of each Work Plan, starting with the current work plan for 2009-2011 on grounds of scientific and technological soundness and completeness against the outstanding scientific questions and challenges in each of the SBAs.

Stakeholders:

- Users of EO data (researchers, managers, policy makers, civil society, (non)governmental organizations, international organizations)
- EO data providers
- Funding agencies
- GEO Task Leads, GEO Committees/Boards, GEOSS Gap Analysis Team

Representatives:

Funding agencies, *Committees*, Participating Organizations

Actively engage and incorporate S&T communities in developing GEOSS

Activity	Short description	Stakeholder
1a	Scientific review of Work Plan	Users of EO, EO providers, Funding agencies, Task leads, Board, Gap analysis team
1b	Review Indicators as measure for progress	Task leads, Boards, M&E Working Group, POs
1c	Continuity requirements for long-term observations	Users of EO (research and decision making), funding agencies, Task leads, Boards
1d	State-of-the-art infrastructure	Users of EO (research and decision making), EO providers, Funding agencies, Task leads, Boards
1e	Responding to S&T needs	Users of EO (research and decision making), EO providers, Funding agencies, Task leads, Boards

Actively engage and incorporate S&T communities in developing GEOSS

Activity:

1b Implement review indicators in the GEO Work Plan reporting to ensure that activities in individual GEO Tasks and Sub-Tasks meet the applicable scientific and technological standards.

Stakeholders:

GEO Task Leads, GEO Committees/Boards, M&E Working Group, Participating Organizations

Representatives:

Participating Organizations, *Committees/Boards*

Actively engage and incorporate S&T communities in developing GEOSS

Activity:

1c Assess the requirement for continuity and long-term monitoring by Earth observation systems of essential data from GEOSS components.

Stakeholders:

- Users of EO data (researchers, managers, policy makers, civil society, (non)governmental organizations, international organizations)
- Funding agencies
- GEO Task Leads, GEO Boards

Representatives:

Users, Participating Organizations

Actively engage and incorporate S&T communities in developing GEOSS

Activity:

1d Ensuring state-of-the-art technology in the GEOSS Common Infrastructure (GCI) and Observation Infrastructures.

Stakeholders:

- Users of EO data (researchers, managers, policy makers, civil society, (non)governmental organizations, international organizations)
- EO data providers
- Funding agencies
- GEO Task Leads, GCI Coordination Team, GEO Committees

Representatives:

Users, Participating Organizations

Actively engage and incorporate S&T communities in developing GEOSS

Activity:

1e Responding to S&T needs and priorities in Earth observation for GEOSS.

Stakeholders:

- EO data providers
- Funding agencies
- GEO Task Leads, GEO Committees/Boards

Representatives:

Funding agencies

Create incentives and promote GEO in S&T communities

Activity:

2a Get GEO/GEOSS better acknowledged in the scientific community.

Stakeholders:

Outreach experts, publishers, science organizations, EO providers

Representatives:

Science organizations, providers

Create incentives and promote GEO in S&T communities

Activity	Short description	Stakeholder
2a	Get GEOSS better acknowledged	Outreach experts, Publisher, Science Organizations, EO providers
2b	GEO Label	Experts in data quality, user feedback, certification, EO providers, Science organizations, Users in S&T
2c	Building awareness of GEOSS	Outreach experts, Science organizations
2d	Showing GEOSS at work	Media experts, Task leads, experts
2e	Enhancing registration of scientific data	POs, Science organizations, EO providers, Scientists
2f	Identify key commercial partners	Outreach experts, Commercial organizations
2g	Catalyze research and development resources	Outreach experts, Scientists, Science organizations, Funding agencies

Create incentives and promote GEO in S&T communities

Activity:

2b Establishing a "GEO label" to recognize the scientific relevance, quality, acceptance and societal needs for activities in support of GEOSS.

Stakeholders:

Data quality experts, user feedback experts, providers, users, labeling/certification organizations, science organizations

Representatives:

Providers, users, science organizations

Create incentives and promote GEO in S&T communities

Activity:

2c Building awareness of GEO and GEOSS in the different S&T communities, within the scope of GEOSS development.

Stakeholders:

Outreach experts, experts, science organizations

Representatives:

Science Organizations

Create incentives and promote GEO in S&T communities

Activity:

2d Showing GEOSS at work with a set of compelling examples demonstrating how GEOSS serves the S&T communities in their work.

Stakeholders:

Media experts, Task Leads, experts

Representatives:

Experts

Create incentives and promote GEO in S&T communities

Activity:

2e Enhancing registration of scientific data sets as an important indicator for potential contributors from the science communities in assessing the relevance of GEOSS for their work.

Stakeholders:

Science/Participating organizations, scientists, EO providers

Representatives:

Science organizations, scientists, providers

Create incentives and promote GEO in S&T communities

Activity:

2f Identify key commercial partners who could contribute to GEOSS and also benefit from improved observational means, products and services and might therefore support certain S&T development.

Stakeholders:

Outreach experts, commercial organizations

Representatives:

?

Create incentives and promote GEO in S&T communities

Activity:

2g Catalyze research and development resources to help engage the S&T communities in implementing GEOSS.

Stakeholders:

Outreach experts, scientists, science organizations, funding organizations

Representatives:

Funding agencies

Facilitate the R&D required to utilize GEOSS and Earth observations for decision support

Activity:

3a Identify R&D needs in support of decision making (URR)

Stakeholders:

Decision makers, Scientists, Researchers, Task leads, Boards

Facilitate the R&D required to utilize GEOSS and Earth observations for decision support

Activity	Short description	Stakeholder
3a	Identify research needs for decision support	Decision makers, Scientists, Researchers, Task leads, Boards
3b	Facilitate R&D in support of decision making	Scientists, researchers, EO providers, Decision makers, Funding agencies, Task leads, Boards

Gaps in Membership

1a Task leads

1b M&E Task Group

1c Task leads, science communities

1d S&T communities

1e Task Leads, S&T communities

2a Outreach experts

2b Certification/labeling organizations

2c Outreach experts

2d Media experts, Task Leads

2e

2f Outreach experts, commercial organizations

2g Outreach experts; relevant science organizations

Specific contributions:

Specific contributions:

- 1a (work plan review): participate, provide feedback
- 1d (state-of-the-art technology for GCI): provide feedback
- 2a (citation standard): participate in phase 2
- 2b (GEO Label): contribute
- 2d (GEOSS Portfolio): proposals for Compelling Examples
- 2e (registration of scientific data): facilitate

- 3a Identify research needs in support of decision making (URR)
- 3b Work with science communities to facilitate the research and development

Activities in 2012:

Second Workshop, tentatively:

- August 30-31, 2012, Cologne/Bonn, Germany
- Topic: *GEOSS: a utility for Earth sciences in service of society*
- Co-located with the Communities of Practice Conference
- Co-located with the 32nd International Geographical Congress 2012, 26-30 August 2012, Cologne.