Task ST-09-02: Promoting Awareness and Benefits of GEO in the Science and Technology Community

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http://www.iag-ggos.org/geo-st0902

Task Definition:

Promoting awareness and benefits of GEOSS in the scientific and technological communities in order to engage the research community in GEO and GEOSS with the goal to **achieve breakthroughs** in the understanding of the Earth's changing environment and global integrated Earth system. The scientific community should **collaborate within GEO** to address interactions between the components of the global integrated Earth system, and connect natural and socioeconomic sciences.

Activities will include: **Forming links** with major scientific research enterprises in each societal benefit area. **Actively encourage** relevant scientists and technical experts to contribute to GEOSS in a truly participatory way. **Reach out** to the world's diverse scientific and technological communities and **make GEOSS more visible** and attractive to them. Contact universities and laboratories to involve them in GEOSS activities. Organize a GEO presence at major symposia and other meetings, for example through plenary presentations or side events.

Output:

* High-level list of relevant major scientific enterprises; early 2010 (activity 1);
* List of target scientific enterprises for linkage/integration; mid 2010 (activity 1);
* Workshop reports; 2011-2012 (activity 1)
* Draft GEOSS citation and citation rules; end of 2009 (activity 2)
* The draft “GEO Label” concept; end of 2009 (activity 2)
* List of core scientific datasets not registered in GEOSS and potential sources; mid 2010 (activity 2)
* Proposal for a set of GEOSS promotion material targeted for relevant S&T communities; end of 2009 (activity 3)
* An on-line annotated GEOSS Slide Library; mid 2009 (activity 3)
* A list of “GEOSS at Work” examples that can be derived from GEO Tasks; May 2009 (activity 3)
* Promotion of the “Save Earth Game”; when? (activity 3)
* Established links between major S&T activities at universities and GEO tasks
* Increased awareness of university programs and about GEOSS, end 2009 (activity 4)
* Targeted promotion of transition from research to operational; early 2010 (activity 4)
* List of relevant major scientific conferences; May 2009 (activity 5)
* GEOSS-related Sessions at IGARSS, AGU, EGU, COSPAR, AOGS
* Draft high-level prospectus for major SBA-specific symposiums; late 2010 (activity 5)

Activities:

1. In order to **foster links with major scientific research enterprises** in each SBA, the following steps are planned: ...

2. **Encourage relevant scientists and technical experts to contribute** to GEOSS in a truly participatory way. That will result in two levels of activities, i.e. by creating an environment that is generally attractive for scientists and technical experts, and by specifically targeting relevant groups: ...

3. Outreach to diverse scientific and technological communities in order to **make GEOSS more visible in and attractive** to these communities will entail a number of steps: ...

4. Specific efforts will be made to **contact universities and research laboratories** with the goal to involve them in GEOSS activities. Steps towards this goal include: ...

5. A key element in the outreach to and engagement of the S&T community is the **presence of GEO at major symposia** and other meetings on different levels. The steps planned include: ...

Activities and Progress:

1. In order to foster links with major scientific research enterprises in each SBA, the following steps are planned:
* establish or identify a high-level list of major scientific research enterprises necessary for GEOSS; to be available by early in 2010; (use input from Task leads to identify major scientific enterprises involved and/or missing from the tasks in coordination with Task ST-09-01). *ICSU to take the lead. Is this confirmed?*
* identify the key organizations currently not linked to GEO and find mechanisms for effective and efficient linkage to these organizations, for example, through POs, the GEOSEC, or targeted workshops; with the goal to have these organizations linked by end of 2010; *Lead? Call for Input from POs?*
* organize, support, launch, or initiate, where necessary, workshops to network the new organizations with relevant Task Team and CoPs in the different SBA (2011-2012).

Activities and Progress:

2. Encourage relevant scientists and technical experts to contribute to GEOSS in a truly participatory way. That will result in two levels of activities, i.e. by creating an environment that is generally attractive for scientists and technical experts, and by specifically targeting relevant groups:

* (Roadmap 2a) Getting GEOSS acknowledged: In the scientific community in particular, recognition and renown are important currencies. In order to increase the attractiveness of GEO and GEOSS for scientists, their contributions must be acknowledged visibly when others use it to their benefit. A GEOSS citation standard will be proposed by the end of 2009 and its use will be promoted thereafter. *Lead?*
* (Roadmap 2b) Establishing a “GEO label”. Develop a concept for a “GEO label” related to the scientific relevance, quality, acceptance and societal needs for activities in support of GEOSS as an attractive incentive for involvement of the S&T communities. A draft concept will be proposed in early 2010 liaising with existing major Earth observation data providers. *Lead?*
* (Roadmap 2e) Enhancing registration of relevant scientific data sets. Increase relevance and benefits of GEOSS registries for scientific communities as a means for dissemination and a source of core data sets, which are often produced by science organizations and needed for both research and GEOSS services. Accomplishing this through targeted contacts with relevant groups will dramatically increase the acceptance of GEOSS in the S&T communities as a resource for accessing scientific data and further motivate registration. *Lead?*

Activities and Progress:

3. Outreach to diverse scientific and technological communities in order to make GEOSS more visible in and attractive to these communities will entail a number of steps:

* Propose, stimulate, foster and monitor the production of promotion material, including but not limited to scientific publications on GEOSS products and services, leaflets catered for S&T communities, and web pages with specific information for S&T users and/or contributors to GEOSS; by end of 2010. *GEOSEC together with STC?*
* Support outreach of GEO Principals, Committee members and other delegates to S&T communities by the provision of a slide library (ppt) that can be used to compile with small effort customized presentation on GEOSS aspects; mid 2009. *GEOSEC with input from GEO Committees? Request to the GEO Committees? URGENT!*
* (Roadmap 2d) Showing GEOSS at work. Support broader involvement of S&T communities by a set of compelling examples showing how GEOSS serves S&T communities in their work. Suitable examples will be identified in cooperation with GEO Tasks and the provision of the examples through the tasks will be promoted. The examples will be accessible through the GEO web page and/or the GEO portals and publicized in reports and at conferences. This activity will strongly feed into the preparations for the Ministerial in 2010. *Lead? Produce a list of candidates by June?*
* ...

Activities and Progress:

3. Outreach to diverse scientific and technological communities in order to make GEOSS more visible in and attractive to these communities will entail a number of steps:

* ...

* A particular way of showing “GEOSS at Work” will be in form of games using GEOSS products, which are currently developed under the lead of IEEE. This activity will also include promotion of young scientist activities through the “Save Earth Game Price” established by IEEE. *Status and Plans:*

- *About 40 submissions for the first phase from all over the globe.*
- *The judging is planned for the third week in May*
- *winners will be announced one to two weeks later.*
- *The second phase starts in June and runs to Sept 2010.*
- *IEEE needs to have subject matter experts for the second phase.*
- *Can the STC engages with IEEE on that? Would be an example of what can be done if we all pull together.*

Activities and Progress:

4. Specific efforts will be made to contact universities and research laboratories with the goal to involve them in GEOSS activities. Steps towards this goal include:

* Disseminate information about GEOSS towards major university cooperation programs and research network identified under (1). *Lead?*

* Establish proactive collaboration between S&T activities at universities and labs identified under (1) and relevant GEO tasks. *GGOS/IAG:*

- *IGCP 565 Project links geodesy/hydrology science community to GEO Water Tasks;*
- *Workshop 'Towards future Satellite Gravity Missions' brings several science communities into GEO;*
- *GGOS Project 'Global Geodetic Core Network' links research&development to a recommendation of a GEO Task*

Other contributions?

* If activities are found to be of appropriate scope and level, promote a transition from research to operational (2010 onwards).

Activities and Progress:

5. A key element in the outreach to and engagement of the S&T community is the presence of GEO at major symposia and other meetings on different levels. The steps planned include:

* Identify major scientific conference and facilitate plenary presentations on GEO and GEOSS in relevant sessions (on-going); *IEEE to lead this. IEEE has a complete list of conferences that the IEEE touches, which contains currently 976 events. This list will be examined in order to determine where GEOSS can be promoted. Other contributions?*
* Work with the scientific organizations convening major scientific meetings to include specific session on GEOSS-related topics, including high-level union sessions, and work on this, if appropriate, with GEO CoPs. Near-term goals are sessions at the International Geoscience & Remote Sensing Symposium (IGARS), July 2009, Fall AGU 2009, the EGU 2010, COSPAR Scientific Assembly, July 2010, and the AOGS 2010. *Lead? Status? Info to POs with request for feedback?*

- A Special Session dedicated to the role of science and technology in GEO is being planned to take place at the next COSPAR Scientific Assembly in Bremen, Germany, in July 2010 (Main Scientific Organizer: N. Gobron, Deputy Organizer: G. Ollier).

- The IGOS Achievements Symposium will be organisation as a part of ST-09-02 with Stuart Marsh, U.K. being the link between ST-09-02 Task Team and the Program Committee.

* ...

Activities and Progress:

5. A key element in the outreach to and engagement of the S&T community is the presence of GEO at major symposia and other meetings on different levels. The steps planned include:

* ...

* Organize or promote organization of side events at major scientific meetings, including GEO town hall meetings, exhibition booth, and open GEO Committee meetings (or parts of these meetings) with reports on GEO activities catered for a broader scientific audience. With respect to the four GEO Committees, it will be promoted that at meetings co-located with major science conferences, open sessions are included with a few presentations on science-related activities (task reports); on-going. *Info to POs with request for feedback?*

* Develop a plan and high-level draft prospectus for a series of SBA-specific major conferences to be convened before 2015 either for all or most of the SBAs; before GEO-VII in 2010. *Lead?*

Resources:

Still to be completed.

Capacity Building Component:

1) Does this Task have a capacity-building component?

Preliminary text: The task aims to reach out to and engage all relevant S&T communities including those in less developed regions. Therefore, the task will have to either develop specific capacity-building activities (not yet included in the planned activities) or promote these together with the CBC.

2) Have any additional CB needs for this Task been identified?

Preliminary text: This task definitely has considerable CB needs in order to engage the S&T communities in a number of regions both as contributor, user and facilitater of uses of GEOSS. Particularly in developing countries, the local S&T communities will have a pivotal role in adapting GEOSS products and services for applications. For that, CB needs will be considerable.

User Engagement Component:

Preliminary text: 'Users' for this task are mainly the S&T communities relevant for GEOSS, who also are potential providers. In a sense, this task is strongly focused on scientific user engagement, and many of the activities are focused solely on this engagement.

Science and Technology Component:

1. Please briefly describe the elements of scientific research or technological development contained in this Task

TBW

2. In relation to the S&T component(s) of this task, please describe gaps, priorities, continuity needs, barriers, scientific expertise and additional resource needs (this information will be used for developing a gaps and needs assessment in Task ST-09-01)

TBW

Membership and Contributors:

Lead (PoC)	EC	DG-RTD	Gilles Ollier
Lead	COSPAR		Jean-Louis Fellous
Lead	COSPAR	JRC	Nadine Gobron
Lead	ICSU	(TBC)	
Lead	IIASA	(TBC)	
Contributor	CEOS	IOCCG	James Yoder
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Contributor	EC		Vojko Bratina
Contributor	EC	EuroGEOSS	Russel Lefèvre
Contributor	EuroGOOS	(TBC)	
Contributor	ESA	ESA	Jean Louis Fellous
Contributor	ESA	ESA	Jérôme Béquignon
Contributor	IAG	GGOS	Hans-Peter Plag
Contributor	ICSU		Gisbert Glaser
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Contributor	UK	IGOS Themes	Stuart H. Marsh
Contributor	USA	(TBC)	
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Issues to address:

- How to increase active contributions?
- Resources
- Leads for activities
- Subject matter experts for SaveEarthGame Phase 2