

## **Summary of the First UIC/STC Joint Meeting May 7, 2009 in Stresa, Italy**

### **INTRODUCTION**

This meeting was chaired by Valanathan Munsami (STC) and Gary Foley (UIC) and attended by many members of both committees. The event provided the UIC and STC an opportunity to discuss common topics and coordinate joint activities.

### **STC ROADMAP**

Joern Hoffmann (STC) presented the GEO Science and Technology Committee's roadmap, which the Committee has been developing over past few months. The STC's main objective is to advance the science and technology (S&T) component within GEO. The Roadmap sets forth the activities the STC will undertake to achieve this objective. There are two types of activities:

- Engaging S&T participants in developing GEOSS.
- Creating incentives and promoting GEO in S&T communities.

With respect to engaging S&T participants, specific STC activities include:

- Reviewing each work plan for scientific and technological soundness and completeness in relation to the outstanding questions and challenges in each of the SBAs.
- Implementing review indicators in the monitoring and evaluation (M&E) framework to ensure that activities in individual GEO tasks and subtasks meet the applicable scientific and technological standards.
- Assessing requirements for continuity and long-term monitoring by Earth observation systems of essential data from GEOSS components.
- Ensuring state-of-the-art technology in the GEOSS Common Infrastructure (GCI) and observation infrastructures.
- Responding to S&T needs and priorities in Earth observations for GEOSS.

Joern Hoffmann noted that the level of review applied to various GEO-relevant products and activities is often unclear. Transparency is important so people can judge whether the outputs will be useful.

With respect to creating incentives and promoting GEO in S&T communities, activities include:

- Acknowledging within the scientific community the work done within GEO/GEOSS.
- Establishing a GEO label to recognize the scientific relevance, quality, acceptance, and societal needs for activities that support GEOSS.
- Building awareness of GEO and GEOSS in the different S&T communities.
- Showing GEOSS at work via a set of compelling examples that demonstrate how GEOSS serves the S&T communities.
- Enhancing the registration of scientific data sets as an important indicator that potential contributors from the science communities can use in assessing the relevance of GEOSS for their work.

- Identifying key commercial partners that could contribute to GEOSS and also benefit from the improved observational means, products, and services that GEOSS provides. Partners that benefit might support certain types of S&T development.
- Catalyzing research and funding to engage the S&T communities in implementing GEOSS.

Two activities (under GEO Work Plan Tasks ST-09-01 and ST-09-02) currently consume much of the STC's efforts. Work includes:

- **Catalyzing R&D funding for GEOSS:** This involves identifying key S&T programs, funding, and other resources; identifying key companies with interests in GEOSS or datasets; reporting on S&T gaps, priorities, and continuity needs to support GEO; and establishing a forum or network of funding agencies to respond to these needs.
- **Promoting awareness and benefits of GEO in the S&T community:** Work includes fostering links with major scientific research enterprises in each SBA; encouraging relevant scientists and technical experts to contribute; making GEOSS more visible and attractive; establishing contact with universities and research laboratories; and establishing an STC presence at symposia.

Joern Hoffmann highlighted areas where the UIC could play an important role:

- **User feedback for GEO components:** The UIC could prepare guidelines and requirements for a mechanism for users of GEO portals to provide feedback on GEOSS components.
- **Continuity indicator for registered GEOSS components:** Continued operation of critical components in GEOSS will be important to users. The UIC could propose a process to evaluate the importance of GEOSS components. This will provide an important basis for ensuring continued operations of essential components.
- **Task review indicators:** The STC and UIC could collaborate in developing indicators for review of tasks sheets. They could ask task leads to suggest appropriate review indicators for their tasks.

## Discussion

- For some things, value only becomes clear over time. User feedback will be important to document this type of value. This type of feedback is essentially peer review after the fact.
- The UIC has been testing the GEO portals at Stresa, with a focus on whether users could find the data sets and applications they were looking for. The STC envisioned the UIC could also help evaluate GEOSS content—i.e., what is accessed through the portals. The UIC can build from its initial testing to also get user feedback on whether users used what they found and whether it met their needs. Who wants to take the next step?
- It may also be appropriate to monitor activity with respect to GEOSS components. A higher use level could suggest greater relevance.
- A UIC member asked whether the STC allowed scientific groups to suggest datasets they would like to have included in GEO. The STC's response was a "careful yes." In STC terms, this activity would be grouped under "enhancing registration of scientific datasets." The UIC member responded that this could be good way for the STC and GEO

to show value to scientific community—i.e., that the GEO political process can be used to enhance scientific value.

- It would be useful for the UIC to provide insight to the STC about how to facilitate the availability of useful information and services to end users such as the public. The UIC can help the STC understand what users need.
- Evaluation can only come after GEOSS has been populated. Can UIC help the STC better engage the scientific community in GEOSS and help them understand how they can benefit from GEOSS?

## **CALL FOR PROPOSALS (CFP) FOR EARTH OBSERVATIONS IN DECISION SUPPORT**

Lawrence Friedl (UIC) presented that status of the recent call for proposals, which is a joint effort of the UIC and Capacity Building Committee (CBC). He described four ways the STC can help this initiative:

- Distribute the CFP and encourage response.
- Provide at least one STC reviewer to serve on the review panel for each SBA area. These can be STC members or experts from STC member countries. Nominations are needed by the end of May.
- Identify people who can serve as advisors to projects.
- Promote the value and registration into GEOSS of datasets that are not currently in the system.

## **Discussion**

- Lawrence Friedl clarified that organizations that want to be involved, but won't be submitting a proposal, could act as an advisor to a proposer. The CFP team can facilitate the first connection. There likely will be negotiation about what level of support is feasible. An advisor's level of effort will be determined by the advisor, not the project team, and could be as minimal as e-mail access. Lawrence Friedl will clarify this and maybe add an FAQ section.
- Lawrence Friedl strongly encouraged Global Monitoring for Environment and Security (GMES) to submit a proposal for a Type III project to demonstrate successful application of Earth observations. This would allow other countries to learn from and replicate GMES successes. These types of projects could be showcased at the GEO Summit.
- Lawrence Friedl clarified that expressions of interest, especially for Type III projects, could be brief and largely cut and pasted from existing materials.
- Concern was expressed that developing countries might be challenged to respond to this CFP.
- STC co-chairs can serve as the point of contact for the CFP—for example, suggesting how to fill gaps in expertise areas.
- Stuart Minchin (STC) offered to serve as a proposal reviewer in the water area and, perhaps also, in the agricultural area. Pai-Yei Whung (STC) volunteered to serve as an advisor and reviewer in the health and agricultural areas, as needed.

## **OPPORTUNITIES FOR UIC AND STC COLLABORATION**

The group discussed possibilities for joint UIC-STC work. Two of the STC tasks (ST-09-01 and ST-09-02) would benefit from UIC involvement to bring a user perspective to the work. Work under ST-09-01 also supports work under US-09-01a. The STC co-chair for ST-09-02 hoped that UIC involvement could begin without delay, as the task team will hold its kickoff call in June. UIC involvement in STC tasks could be incorporated into the UIC's Activity Plan. A call with the co-chairs of the two committees could be useful to explore further opportunities for collaboration. Communities of practice also would benefit from STC involvement, since STC members should be (or already are) part of these communities. Gary Foley volunteered to work with the STC with respect to modeling-related activities (e.g., decisions support tools) that could support end users.

**Action Item:** During the next few weeks, the UIC and STC will review opportunities for collaboration and suggest which members can participate in specific projects.

**Action Item:** Kathy Fontaine will develop a list of UIC activities that would benefit from STC participation.

**Action Item:** At their next joint meeting (September 2009), the two committees will continue discussions about activities that would benefit from joint participation.

## **IGOS-P THEME LEADS**

Gary Foley (UIC co-chair and lead for the GEO Community of Practice [CoP] Task US-09-01b) briefly described Task US-09-01b. He noted that CoPs should have members from the STC to foster understanding of the science and technology needs of GEOSS and end user needs. This is clearly an area where the UIC and STC should collaborate.

## **Discussion**

- The IGOS-P Themes represent a science-based community. If the IGOS-P Themes become CoPs, should they expand to include end users, or should GEO catalyze the formation of others CoPs to include end users?
- Having two parallel CoPs in the same area would be a “disaster.” The IGOS-P Theme teams provide good roots and, as CoPs, need to grow in the direction of the end user.
- For CoPs to succeed, those in an organization expressing interest need to be at a sufficiently high organizational level.
- CoPs need to include academics and entrepreneurs, as well as organizations.
- Rick Lawford (UIC): The IGOS-P Water Cycle Theme team members preferred focusing on science, so were challenged to include end users when they were part of IGOS. However, when they became part of GEO, they wanted to become a full CoP with connections to all GEO committees, including the GEO's Architecture and Data Committee (ADC) and CBC. They plan to continue their Theme activities as the science component and expand to connect with users.
- Hans-Peter Plag (IAG/GGOS): The situation is different with the Coastal Zone CoP, which is taking over from the IGOS-P Coastal Observation Theme. This CoP has been organizing workshops to explain GEO to users and see what users need. CoP members

recently talked to the GEO Secretary about involving industry working in coastal zones—for example, to get coastal zone conventions.

- The 2007 Frascati declaration<sup>1</sup> recommended building a coordination body to ensure further development of the geohazards initiative and Geohazards CoP. The Declaration also recommended international and intergovernmental efforts to monitor and study selected reference sites where populations are exposed to geological threats such as volcanoes and earthquakes. This would be done by establishing open access to relevant datasets according to GEO principles in order to foster collaboration between all the various partners and end users. This effort, known as the Supersite Initiative, has stalled but efforts are being made to revive it.
- The Geohazards CoP was led by the Geohazards Bureau and was very active. The Bureau decided not to continue as leaders in December 2008 after they did not receive sufficient support from other organizations. Other organizations have been trying to rebuild the Supersite Initiative and have recently written proposals to the European Space Agency (ESA). Another focal organization and core team are needed to reactivate this group.
- The Supersite Initiative could benefit from using a regional (transnational) approach with regional leads. A Geohazards CoP could have facilitated workshops to help the science and technology community understand the Supersite Initiative.
- For the global Geohazards CoP, a series of workshops could be organized to facilitate exchange between regional activities, address science and R&D activities, and maintain the former IGOS-P Theme report. Advice from the UIC and STC would be helpful on how to recover the position of this CoP as a strong community and endorse the proposed way forward.

## **STATUS OF US-09-01a**

Lawrence Friedl presented GEO Task US-09-01a, being conducted by the UIC. He asked for STC support in suggesting 1) members for Advisory Groups in the nine SBA areas, 2) reviewers of the draft reports in the nine SBA areas, and 3) relevant documents describing user needs. STC members mentioned science plans (e.g., from the National Science Foundation) and IGOS documents (including several produced for CEOS) as potential sources of user requirements. Stuart Minchin volunteered to help review the draft report in the water SBA area.

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<sup>1</sup> Developed at the 3<sup>rd</sup> International Geohazards Workshop, Frascati, Italy, November 2007.