Group on Earth Observation (GEO) User Interface Meeting September 23, 2008

Day 2 was divided into two parts. Most of the morning was a continuation of the previous day’s agenda with the full UIC in attendance, and focus on the UIC role. Upon development of the charge for the break-out groups, there were 3 parallel break-out sessions for development of answers to the charge. The three groups were:
- Health, Disease, Climate and Air Quality
- Water
- Land, Biodiversity and Energy

Agenda for Tuesday, 23 September, 2008
(Meeting Location: University of Colorado, Boulder, Co, USA, Discovery Learning Center Room)

UIC Full Session
Discussion on what role should the UIC play for the future for:
1. New Work plan tasks,
2. Communities of Practice and the IGOS-P themes,
3. GEOSS Common Infrastructure,
4. Revision of the 6-and 10-year GEO targets

The Charge to the Breakout Groups will be developed from this discussion

Progress on US-06-01 and Discussion, Lawrence Friedl, UIC/NASA
Update on weather user requirements, Manfred Kloeppel, ECMWF

Updated presentation on Wiki, Ruth Duerr, IEEE
GNU international stakeholders workshop, and the Wiki, Herbert Haubold, Umweltbundesamt Austria

Agenda for the parallel break-out sessions will precede the report on each break-out session

UIC Full Session Notes

Mike Tanner – (see file 1-Mike-Tanner-UIC-role).
Mike’s presentation addressed the role of UIC within the community. He covered the following topics:
- How can UIC engage the community?
- Task Allocation: they are giving us a lot of authority to engage everyone; they are not very specific.
- Guiding the Work Plan: there is going to have to be an interaction between the UIC and the user community. We are going to ask UIC to review the task sheets and come back with corrective actions that may be needed. This is what is new
and is the added value. Most tasks have the right leads and contributors. We would like UIC to reach out to the CoPs and nudge them to register their datasets.

**Lawrence Friedl** – Does that mean that the committees have more authority?

**Mike Tanner** – Yes, the committees can be seen as the directors. GEOSS Common Infrastructure (GCI) and Data Sharing are the two cornerstones of the 2009-2011 Work Plan. If you are not on board with these two goals, then you should reconsider.

**Ellsworth LeDrew** – At the workshop in Toronto, they were hoping to start populating the registry, but spend most of their time understanding how the registry works.

**Gary Foley** - On the agenda tomorrow is the “Requirements Registry” and the status and issues. How can the communities of practice and IGOS – P themes use it? Resources are an issue that will be discussed. He has a small amount of resources.

**Mike Tanner** – He meets with the portal providers on a weekly basis. These people are here to facilitate a discussion. He then talked about the demonstration attempts to demonstrate the portals, without much luck (nothing was populated)

**Gary Foley** – Tomorrow Doug Niebert from ADC will brief the registry; second item on the agenda will be the conops document; it would be good if the portal provider attended that meeting in addition to the ADC.

**Lawrence Friedl** – You have 2 messages; Should the focus be on providers or users or both?

**Mike Tanner** – First get the CoP data into data sets; then link users and see what they use. First look at weather (very mature), then go on to less mature systems. Engage the GEO community. Is CEOSS flying the right satellites? CEOSS should not be out there engaging users. CEOSS should be hearing from the UIC. UIC should be the focal point, identify cross-cutting issues. User driven approach to GEOSS: this is a whole new perspective to GEOSS. The original work plan, where we had a ton of tasks, was about having people feel involved. That was the way to build. Now we are all involved and the mobilization is happening globally. Developing nations are looking to others for guidance.

**Gary Foley** –He heard the talk but does not see “the user driven approach” in the work plan (hears the talk, but did not see the walk)

**Herbert** – He hopes that the talk is reflected in the next version of the work plan

**Mike Tanner** – May be we need take a step back and be more specific about the work plan; this is a strong message and we will scrub the document next week
Lawrence Friedl – The rhetoric needs to be included in the work plan. Bring introductory statements instead of just including tasks.

Mike Tanner – He agrees because they actually have been receiving direction to reduce the number of tasks. He will work on it. If we are not specific in each section about the roles of each community, let us know.

Lawrence Friedl - We need to hear as a committee that the GEO Secretariat, executive board etc, that they are not seeing enough progress out of the UIC. Perhaps we are not communicating what we are doing. We need to set some goals. All of us need to be more active and energized to demonstrate what we have been doing. ADC has been doing this.

Mike Tanner – UIC has been doing a lot of work, but not communicating. Communication is an issue however ExCom did not believe that the UIC should not be involved. They thought perhaps there were just structural issues

Ellsworth LeDrew – There are 3 energy tasks in work plan, each lead by a different country; how can they get the information from the strategic plan which is developed by the CoP

John Lyon – Two of those products were shown at Cape Town; communication is a two way street

Mike Tanner – Yes you are right. Perhaps we need more discipline in how we communicate and listen and get the information from the bottom up to ExCom.

Lawrence Friedl – GEO secretariat wants task leads to be countries, or organizations rather than committees

Francesco Pignatelli – The European Commission sent comments to the GEO Secretariat and not many were incorporated into the work plan. We are developing new comments and want a more active role. Are we planning to incorporate another set of comments in the work plan? We need task for UIC; 0601 at least provided a mechanism to show progress. We need fresh ideas to be more effective – for example improve GEO website with further information. What is the logic to accept or not accept comments?

Mike Tanner – We need to make process more open; Jose is the ultimate acceptor of the comments; we have a matrix of every comments with rationale of why comments were not accepted; this feedback loop needs to take place

Hans-Peter Plag – The communication problem is a symptom rather than the cause; co-chairs do not fully appreciate the complementary nature of the committees. Horizontal communication is not working. There is not appreciation for what the UIC is trying to do. Are other committees trying to find their own way to reach users? Are co-chairs from S&T or ADC asking for help from UIC in reaching to the users?
Gary Foley – S&T had no interest in working with us

Hans-Peter Plag - Committees meeting in parallel is difficult; we should have UIC and CBC one day, UIC and ADC second day, separate meetings the third day

Gary Foley – That is good feedback.

Unknown – When discussing the role of this committee, you mentioned that CEOSS should not interact directly with the users

Mike Tanner – Absolutely. He threw the stick out to CEOSS to engage the UIC. He thinks the next level they need to go to, is to engage the in-situ community as well as satellite community

Mark Cantwell – The governance section of the work plan does not really talk about the executive committee. This is resonating with me since we are talk about communication plans.

Lawrence Friedl – US 06-01 is critical in engaging users. Need help with task from a broader cross-section of communities (broader than US and Canada). Need bigger committee to do the tasks Mike talked about. He will send an e-mail requesting help.

Francesco Pignatelli – He agrees because they have a large mandate. In the e-mail please outline the clear steps to participate. There will be a symposium in Italy next year (in Stresa) – one of the goals is to try to enlarge the UIC community. This group needs to be enlarged.

Michael Brady – The work plan version 2 has a list of members who have signed on to the CoPs. In forestry, he has never heard from most members. He may need help from the secretariat

Ellsworth LeDrew – He has the same situation. He sent out an invitation and got very little response. He has heard that many of these countries joined for political reasons but did not get actively involve

BingFang Wu – Can anyone be involved?

Lawrence Friedl – As a member of UIC, anyone can get involved; as a representative of a member country, it is up to the country.

Jinlong Fan - China has about three people.

Ellsworth LeDrew – Who are they, where is the list?

Lawrence Friedl – Do you have three, or think that there should be three?
Jinlong Fan – There should be three. We can identify three quickly.

Gary Foley – This is an action item for the GEO Secretariat.

Lawrence – How about helping to identify those people. Through US-06-01 we can find people in the communities of practice.

Gary Foley - Between US-06-01, CoPs and IGOS themes we have covered all SBA areas

Lawrence Friedl – We can identify Points of Contact and will tell the secretariat

Manfred Kloeppel – Presentation

Progress in the area of weather; they have found an analyst who will start working it. Right now, the advisory group is only Manfred; he is asking for volunteers

Herbert Haubold - Wiki demonstration

The GEOSS Best practice Wiki is used by the GMES network of users. They are especially active in transverse areas including governance (user driven procurement), economy (funding evaluation of data products), communication between users and providers (continuous interaction between users and providers)

Gary Foley – ADC will encourage UIC members to populate the wiki; they could also reference wiki on the UIC site

Mark Cantwell – You demonstrated input, but not how the wiki works

Herbert Haubold - You have to log in to post a comment and you can comment and generate a discussion and receive a notification when someone else has posted. The tags were very hard to implement.

Gary Foley – Ruth Duerr will provide broader discussion this afternoon

Gary Foley – We need to come to conclusion regarding the charge for breakout groups

Ellsworth LeDrew – He led the discussion on developing the charge for breakout sessions, and developed a template with a series of questions which addressed UIC priorities based on inputs from several participants. The charge for breakout session is included below:

1/ Work plan: Consolidation of tasks is a good first step, but there is no coordination between sub-tasks. Suggest leads for main tasks to coordinate work of sub-tasks.
2/ Work plan: Suggest that new tasks have references to community of practices
3/ Work plan: Should appendix A participants (list of CoP members) be rationalized
4/ Work plan: Transverse nature of UIC: propose language that describes general role and identify specific activities.
5/ Work plan: What are specific activities in 3, 6, and 12 month time frame to get CoP engaged in Common Infrastructure and Portals, (emails, workshops etc)
6/ Work plan: Interaction with other GEO committees, ExCom, and Secretariat
7/ Ask how many partners are needed to do work to make each activity successful.
8/ Abstract UIC etc needs from collective knowledge of other meetings that will guide our activities, eg. Portal collections. How is the data used for capacity building?

Later in the afternoon, the full UIC reconvened briefly to hear a presentation of the Best Practices Wiki by Ruth Duerr

**Ruth Duerr** – Wiki presentation to UIC combined group
What is a best practice? In a broad sense it includes: outreach, analysis technique, anything which helps communities interoperate. It can be very simple or very complex. It can be regional, local, or global. The key is as follows: they are accepted as applicable to the community. The wiki is an open forum. All you need to do is register an account in order to post (all it requires is an e-mail address). The wiki went operational in June, but has not been very highly publicized.
It fits within the architecture. It used to be a registry, but a wiki is a better fit to facilitate collaboration. Practices are organized by thematic areas and cross-cutting areas; use a template to enter data; anybody can decide to submit a best practice; anyone can see and comment In order to facilitate dialogue, there is a concept of editors; they help solicit practices, annotate conflicting practices; explain what it mean to approve a best practice. Being an editor is a light weight task performed by volunteers. She is soliciting volunteers for several areas. She addressed the implementation schedule. The issues are to – maintain visibility and get additional editors (2 telecons for editor groups). She gave an example on web using data citation example; had to decide what tags to use; evaluation – use of star concept, but it is problematic. Right now thwy look at the data entered, how many timesit has been accessed; they encourage a lot of links. A community can use this to hash out issues.
Meeting note for Day 2 – Break-out session on Health, Disease, Climate and Air Quality

Agenda for Tuesday, 23 September, 2008
Parallel Breakout session - Health, Disease, Climate and Air Quality

Stan Morain and Amy Budge, University of New Mexico. Results of the GEOSS workshop held in Beijing in July.


Michael Obersteiner, IIASA. Benefits assessment of GEOSS.

Manfred Kloeppefl, ECMWF. Status and future plans for TIGGE.


Montira Pongsiri, EPA. The Strategic Assessment Group work on needs.

Breakout session Notes

Attendees: Montira Pongsiri, Dave McCabe, Stan Morain, Amy Budge, Lawrence Friedl, Manfred Koeppel; Michael Obersteiner, Francoise Pearlman

The group updated the Charge to Breakout Groups for their specific needs. They also added a number of clarifications. The updated charge is shown below (updates in bold):

1/ Workplan: Consolidation of tasks is a good first step, but not coordination between sub tasks. Suggest leads for main tasks to coordinate work of sub tasks.
2/ Workplan: new tasks have references to community of practices

A summary of initial discussions in this area is provided below:

- Under the governance section of the work plan, be explicit on CoP as a mechanism, define CoP
- UIC to decide: do we want CoP to be top-down or issue-oriented? (grassroots)? If the latter, the Call for Participation (CFP) is one mechanism to create new CoPs. Health issues could be identified. CFP process could help to identify new CoPs around a specific issue, and they could be sources for user needs/observational requirements.
- Revision to UIC/COP language in work plan, p7?
Group on Earth Observation User Interface Committee Meeting – Monday September 22nd through Wednesday September 24th, Boulder, Colorado, USA

- Start with existing CoPs, the “low hanging fruit”: early adopters can spread the word, use networks; other “CoPs” currently unknown: is UIC capable of creating new CoPs?

3/ Workplan: Should appendix A COP participants be rationalized
4/ Workplan: Transverse nature of UIC: propose language that describes general role and identify specific activities.
5/ Workplan: What are specific activities in 3, 6, 12 month time frame to get CoP engages in Common Infrastructure – Portals, and Data Sharing Principles, (emails, workshops etc)
   - Task outputs for portal registration – components and services
   - Input to “best practices” Wiki?
   - Contact attendees from workshops to input datasets, test Wiki and data in portals, take responsibility as point of contact on defined Tasks

6/ Workplan: Interaction with other GEO committees ad ExCom, Secretariat
7/ Ask how many UIC Committee members needed to do work to make each activity successful?
   - Recommendation for Task leads to liaise with a UIC Committee member?

8/ Abstract UIC etc needs from collective knowledge of other meetings that will guide our activities, eg. Portal collections. How use data for capacity building?
   - Who are the users?
   - What data (observations, models, indicators, etc.) do they use?
   - Do they know how to use these data?
   - How do they use these data, for what purpose?
   - What do they need to do their work better?

5/ Work plan: What are specific activities in 3, 6, 12 month time frame to get COP engages in Common Infrastructure and Portals, (emails, workshops etc)

- Key issues to address to inform schedule of activities:
  - Portal currently in preliminary stage – need early input for readiness for new communities to engage effectively.
  - Priority-setting: by SBAs, and if so, which ones?
  - Introduction to GEO Portal “Infrastructure 101”– What is it? For what purpose? Why should you contribute? : Develop training module for future use. Integrate this session into meetings; ADC and UIC should jointly work to develop this “module”.
- 3 month: Task outputs for portal registration and “best practices” Wiki components and services
  - CFP to build new CoPs from the ground up? If so, what are the key issues?
- contact attendees from these specific workshops to input datasets, test Wiki and data in portals, take responsibility as point of contact on defined tasks
- Recent and Upcoming meetings:
  - User and GEOSS Architecture (July '08, Beijing)
  - ECO Health International forum (Dec '08)
  - ICSU JSPT (Jan 09, Pretoria)
  - TIGGE Users' Workshop '09
- Input to “best practices” wiki?
- 12month: Once portal is at the right stage, engage community of users to input products for registration and provide feedback
- 12 month: ISRSE Conference (2009) – dedicated time and resources for participants to access / experience Portal
  - By Oct 10: ISPRS-sponsored conferences to target (Stan Morain and Amy Budge)
  - ISDS Annual Meeting?

Initial focus is on presentations by UIC members on progress

**Stan Morain and Amy Budge**, University of New Mexico. Results of the GEOSS workshop held in Beijing in July.

**Amy Budge** – (see file 3-Health-Amy-Budge-Beijing-workshop-report)
Amy provided a summary of GEOSS workshop in Beijing. The format was a one day workshop. They had GEOSS infrastructure demonstrations via video. They had over 200 people who registered but only about 25 people attended, representing 6 countries. GEOSS workshops are free to attendees. As a result, people who register do not necessarily attend. What happened is that a lot of students especially signed up for everything which was free, with no real intent to attend. One of the lessons learned is to consider charging a small fee (like $10). They did not conduct any break-out session due to lack of space in the conference center. Workshop presentation addressed the following issues: 1) in Japan – dust due to inappropriate management; they have a model for aerosol species in the atmosphere; need real time data (need more ground information to validate models);2) issues in Mongolia - Air pollution in Ulaan Baatar city: a) anthropogenic sources, b.. mineral dust and c. forest fires. Air Quality (AQ) master plan initiated; forecast system is needed and more AQ monitoring stations; 3) Korea – a billion $ per year economic consequence from dust. The programs/organizations which could contribute to solutions include ISCU, WMO, CDC in China, GEONetcast & GEO. Workshop recommendations included the following: – compare model results, more environmental information to better anticipate outbreak for flu; models are complementary; expand dust forecast to include India in Asia arena. She tried to answer Gary Foley’s questions: 1. Who were users? Dust forecast models, research scientists, information system developers, medical doctors. Stan Morain added: epidemiologist involved in disaster reliefs. 2. What data is used? LiDAR, MODIS, SPOT,
Group on Earth Observation User Interface Committee Meeting – Monday September 22nd through Wednesday September 24th, Boulder, Colorado, USA

Meteorological data, air quality monitoring. 3. How was the data used: Verification and validation of model output, input parameters, analysis, establishment of boundary conditions 4. What types of data is needed to do their work better? More AQ ground stations data, spec of particulate matter, environment data, frequently refreshed data such as land cover, real-time data

Discussion:

Montira Pongsiri – Stan had mentioned an ISCU project. Is that related to this workshop?

Stan Morain – not really; he offered to talk about the project later

Michael Obersteiner - This would be complimentary for collaboration for policy making.

Amy Budge - some of these models are intended to aid public health officials

Stan Morain – getting more and more in the policy area

Amy Budge – models nested within weather forecast models; working with public officials to for example issue alerts when there is a dust storm

Lawrence Friedl - Is there a list of people who attended this workshop? Can you ask them to make comments about it. Amy Budge: yes. As best as possible. Francoise Pearlman: may be difficult as some of the attendees wrote their names in Chinese.

Manfred Kloeppel– pilot service (atmospheric services) monitors green house gases and aerosols

Montira Pongsiri – relate activity on dust monitoring for meningitis; subtask using weather information; working along the meningitis belt in Africa; first struggle on the ground to get the health communities involved and to accept the utility of environmental data

Amy Budge – similar thing in Mexico; health community involved from the get go

Stan Morain – workshop in Goa; David Stevens took the participants to task re their participation in GEO. However, India has to offer tele-medicine to the community

Lawrence Friedl – action to contact people at the workshop using attendance list for China; contact attendees from specific workshops to become POCs to put data in portals, wiki,

Montira Pongsiri – What about tasks US 0601 and 0602;

Lawrence Friedl – there is push back to get those tasks back in

Francoise Pearlman – what about data sharing principles?

Lawrence Friedl – add data sharing principles to question 5 specifically

Lawrence Friedl – UIC member need to report on regular basis on their tasks (require reporting structure); but there are no tasks for the UIC to track; Mike Tanner said that the user engagement should be everywhere

Michael Obersteiner - last week there was a discussion re reporting indicators – how to set up a structure within GEO to show that volunteers are accountable; how much should the UIC focus on common infrastructure. There are templates used in business (for example by the world bank); Ed Washburn will report on the Agenda during the C4 meeting on Friday

Stan Morain – each year ICSU has a grant program but not much money (30,000 euros to ISPR for a year contract). There is a limited scope and the final report is due on September of 2009. The ISPRS and ICSU Geo Unions consist of: IUGG, IUGS, IUSS,
ISPRS and the International Medical Geologists. ICSU has initiatives to look into the question of Science and Health and Well being in urban and rapidly urbanizing areas. The Scoping committee decided to take a system approach documented in a 20 page document. GEO Union had already identified focus areas. Stan mapped the GEO Union contribution to the broader ISCU proposal. Stan planned to have a meeting to get GSPT members together w/ African Scientific colleagues to identify models, processes and information need to aid decision makers to better understand health issues. The .3 day workshop will be held in South-Africa. Each person representing the GSPT will work individually and collectively to assess how their GEO union can contribute to the solution. The Stresa meeting is identified as a second meeting venue. IGARSS in Cape-Town is another possible venue. If the ICSU panel accepts the report, they may proceed with the establishment of an initiative. Health and well being includes things like nutrition, housing, and other items which are not connected with earth observation.


David McCabe fellow as US EPA (see files 4a-Health-Dave-McCabe-outline; 4b-Health-Husar-notes; 4c-Health-Keating-TFHTAP)
Outline; material from Rudy Husar and Erin Robinson, Terry Keating, proposed addition to the work plan (one in version 2, one brand new); how to transform ECIP into real CoP, but missing international participation
Rudy’s presentation
- 1. Marketing figure of GEOSS: We're trying to put users in SBA's. 2. Model being infused with managed support. Rudy's idea is that GEOSS is market driven.
- When it comes to decision support, it is very “human”. The art of technique is important as far as support is concerned. This is not a simple merging of data. (HTAP > Except Event > Real Time.) Each user has different Needs and Perspectives.
- Interoperability stack is under way: Support of human interaction is weak and poorly understood. Users of SoS are just one of the key stakeholders. Need developers, acquires, testers, trainers, researchers. Need full array of stakeholders for AQ community.

Discussion
Lawrence Friedl – since Rudy has been involved with ESIP as a CoP; how has he approached it; do they have a specific goal in mind of what they are trying to accomplish?
Dave McCabe - ESIP responded to the pilot, to build a community forum; how do you build momentum; need to talk to Ellsworth about his experience with the energy CoP, re what it means to be a CoP

Montira Ponsiri – is the secretariat interested in registering CoP
Lawrence Friedl – CoPs are successful when people get together to solve a specific problem. There is currently an artificial top-down approach to CoPs. Identify key issues that need to be addressed; example – boundary layer for observations

Dave McCabe – very little participation in the pilot;

Stan Morain – WHO is not a member of GEO

Lawrence Friedl – UIC to set up goals and let CPs bubble up to resolve them

Michael Obersteiner – Where are the gaps in established communities which GEO could contribute to resolve

Montira Pongsiri – They issued a call for proposals; funding small, and did not require that end-users participate; it was good working model

Dave McCabe – Next presentation
He described the process for TF HTAP. Charged to improve scientific understanding of intercontinental transport and hemispheric. Air pollution in Northern Hemisphere
Policy-relative Science Q’s.: How does hemisphere Transport affect air pollution? Emissions, etc. Participation was extremely successful; policy relevant questions – very focused questions; China very involved at a non-official level (not part of UN ECE obviously); scientific areas – integration of observations – NILU Norwegian something; NASA Langley; HTAP multi-model experiments (over 35 models – direct comparisons – example cut emissions in north America by 25%); modelers involved because they get model-to-model comparison; interim report focused on Ozone and aerosols; driving toward 2010 report to document state of science; teaser plot (example – lots of data to mine); cross-cutting integration between 3 types of efforts is still very difficult; aspiration is to get operational tools; map of servers (they actually work together); example of piece by piece service oriented architecture approach for DataFed Web – diagram shows value chain; NEISGEI Java script “Mashup” to compare model outputs; suggested additions to work plan: DA-09-02 in version B of work plan; demonstrate the use of web services to compare model outputs; HE-09-02 – global monitoring plan for atmospheric mercury (EPA building network from current monitors; standardize the procedures and share the data)

Discussion
Stan Morain – most of their work in South West is at 2.5 and 110; would it be possible to put their models in HTAP?
Dave McCabe – models are well defined and global rather than regional; events are focused on wild fires (because they have a lot of aircraft data)

Michael Obersteiner. IIASA/Geo secretariat Benefits assessment of GEOSS. presentation (see file 5-Healthl-Obersteiner-GEOBENE)

GEOBENE project – access information from GEO web site;
SBA description Health:
- Ongoing work by partners
- What are the impacts of society
Mostly focused on the performance indicator group which have 3 steps:
- Develop methodologies on how to assess the value of the information
- Develop tools to crunch the numbers
- Make connection to simulate new data streams

In the overall structure to GEO case studies to SBA's:
- Geo-benefits of power plant location (SBA Energy)
- Progress in real options and portfolio applications to energy planning (SBA Energy)
- Global crop yield gap assessment using EPIC (SBA Agriculture)
- Benefits of spatially explicit bio-energy crop yields (SBA Agriculture)
- Seasonality of incidences of childhood type 1 diabetes (SBA Health)
- Deforestation and land use change (SBA)
- Estimation of catastrophe losses (SBA Disaster) Secondary effects of earthquakes.
- Banda Aceh case study: the information gathered were not communicated well. Very litter internet connection, etc.
- Happiness research. Global survey and also a detailed survey in the UK. Sunshine, economic position, etc. determines level of happiness.
- The type of methodologies used depends on the study question.

Discussion

Lawrence Friedl – do you have a record of all the techniques you have used?

Michael Obersteiner – They are constrained by data availability; every case is very special; integrated model – inform certain parameters; general template (benefit assessment approach), chop up the value chain in pieces (input, baseline, GEOSS case); make link to observation or simulated observation; also look at behavioral issues (example if there are too many tsunami warnings, they are ignored)

Montira Pongsiri - Cost benefit analysis is critical for decision makers; can we design a question which helps deciding what kind of data is needed?

Lawrence Friedl – Is there something that needs to be reported out with respect to this, that we can aid in getting users involved? What recommendation can be made on Wednesday to the UIC?

Michael Obersteiner - If we want to evaluate progress in GEO, we need to develop a template. Need to go through structured thinking to come up with a model.

Lawrence Friedl - as we progress with US601, what can we do in the near term?

Michael Obersteiner - Based on our findings, we can show to others the examples of benefits of some of these data-sets
Manfred Kloeppel  Future plans for HORPEX Interactive Grand Global Ensemble (TIGGE) – see file 6-Health-Manfred-Kloeppel-TIGGE

- THORPEX: The Observing System Research and Predictability Experiment.
- Establish in 2003 as an international global TIGGE Concept: international data archive improving high impact weather forecasting
- Partners: NCAR, CMC, ECMWF, UKMO, NCEP, etc.
- WIP: Flood forecasting systems, Early warning of severe weather events, products easy to interpret by users, develop verifications against observations.
- Global Interactive Forecast Systems (GIFS): Prediction, weather forecasts, decision,
- GEO Tasks: International collaboration to increase possibilities of high impact weather.
- Develop user community to develop links. In 2009 a users' workshop is planned
- GEO to continue support TIGGE and co-sponsor 2009 user meeting.

Discussion
Michael Obersteiner – what is the GEO added value?
Manfred Kloeppel – building the links with users
Michael Obersteiner – How does user engagement work? how do you mainstream TIGGE outputs to the user community?
Manfred Kloeppel – By conducting workshop
Montira Pongsiri – who is using TIGGE?
Manfred Kloeppel – Agencies (national weather service), large spectrum

Montira Pongsiri, UIC. (see file 7-Montira-Pongsiri-GEO-BON)
Ecosystems bio-diversity and health sub-task
- Want to better characterize is disease
  - Biodiversity is increasing
  - Infection diseases appear to be emerging and re-emerging at a faster rate.
  - Biodiversity and Health is an opportunity for GEO want to demonstrate value at the GEOSS structure. Want to get economists involved to figure out what information to feed to that community. These studies are occuring at different levels and want to figure how to scale up.
  - HE-09-03 Subtask: Ecosystems, Biodiversity and Health: implement research.
  - Start with and Issue from the Ecologists
  - Look for connection with global priorities
  - EPA: developed a solicitation process to bring together people of different Disciplines. Encouraging use of those observations with field data.
  - Lyme disease project: working with NASA aims to test new hypotheses. Use of NASA TOPS system
    - who are the users, what data do they use, how do they use these data & for what purpose, what do they need to do their work better?
- Protecting Human Health: Environment factors, develop new tools, improve strategies and analysis, better cross-sector communications
Expected Outputs: User needs and observational requirements, distributional disease risk models, integration of datasets.

Discussion

Stan Morain – The millennium report is a good source of information; eco-system transition goes from non-urban to urban; have you considered any such thing for biodiversity?

Montira Pongsiri – All of our projects collect field data baseline; monitoring is done for our projects; decision making context impacts how we use and develop land (how we break up forests); decision from local community have far reaching impacts; how do we manage land to protect public health

Stan Morain – urbanization as we think of it, is probably not the type of urbanization taking place in Africa

Lawrence Friedl - Sub-task: What are we as GEO doing with our tasks and rhetoric? How do the tasks go?

David McCabe - GEOSS is described in two parts: architecture and a vision. We're supposed to be reviewing the work plan, but what do with do with the architecture part of things. Which one gets served?

Lawrence Friedl - Maybe what we need to do, is submit a revision of text that talks about what needs to be built for the GEOSS architecture, what is needed to develop GEOSS, then what is needed as the vision - 3 parts: GEOSS General statement, GEOSS Architecture and GEOSS enabling support.

Montira Pongsiri - Do the task sheets need to be redeveloped as well? Lawrence, yes, they need to co-inside with the work plan.

The group dispersed to work on answers to the initial charges. The resulting presentation will be briefed at tomorrow morning’s meeting.
Agenda for Tuesday, 23 September, 2008
Parallel Breakout session - Water

Richard Lawford, University of Manitoba. The water cycle CoP
Michael Nyenhuis and Ulrich Looser, Global Runoff Data Centre (GRDC), Germany. An overview of the GRDC activities and status and plans of the Global Terrestrial Network for near real-time river discharge.

Hans Peter Plag, UNR, Steven Greb, Wisconsin DNR, Paul Diagiacomo, NOAA. Coastal Zone CoP.

Sushel Unninayar, NASA. Water and climate-invited.

Michael Tinkleman, ASME and John Lyon, UIC/ASME. Water and energy nexus roadmap.

John Lyon, EPA. Strategic Assessment Group work on needs.

Breakout session Notes

Attendees: Mark Cantwell, Michael Nyenhuis, Francesco Pignatelli, Hans-Peter Plag, John Lyon, others
Moderator: John Lyon

There was discussion about whether or not to include the planned presentations in the talk since we were already behind schedule. The group decided that if the presentation did not serve the purpose of reaching the break out session’s goals, then they should skip the presentations. The group also decided not to address all of the 8 charges if they thought they did not apply.

Main themes of the afternoon discussions:
1. Amending the Terms of Reference
2. Attracting new members/attrition of members
3. Adding the reason why tasks are being done and who benefits to the task description.
4. There was some confusion about whether the charges being discussed were for the entire group, or just for the water group.
5. Ways in which to make the UIC more visible or inherent in the work plan.
6. Better ways to facilitate communication horizontally and vertically using the website.
7. How to use the website to increase our visibility.

Mark Cantwell, being the newcomer was concerned that he did not fully understand the purpose of the UIC from reading the Terms of Reference. He thought they were too vague. He wanted them to be rewritten so that the role was clear. This would also make joining the group more attractive since people would know what the UIC was about. Mark also suggested that the UIC make itself more implicit in the tasks in the work plan so that they would have to be involved and tasks could not be taken away.
Francesco Pignatelli was most concerned about the visibility of the UIC and ways to communicate what the UIC is accomplishing. He is concerned the UIC will not get credit or recognition for the work that has been done if it is not visible. Communications should be increased in the website and tasks. John wanted to remind everyone of the power that this group does have. In early versions of the UIC, the SBA framework was developed.

Francesco was also concerned about the reality of updating the terms of reference since it was approved in the past by the plenary and was now hard to change. It was also left vague to allow for flexibility. The group could regret getting pigeon holed into something. He agrees that we have evolved since then and it might be worth trying to revise. Mark agreed that it did not have to be a piece of paper, but as long as there was something outlining the UIC role. John agreed to bring it up to the larger committee.

They agreed that the task sheets should be updated to reflect why tasks were being done and who would benefit. Francesco thought it would not be feasible to go and update all of the task sheets, but links could be created to the website. They thought that they needed to be careful though of what was recommended, versus what resources were available. If the resources are not available the task could be assigned directly back to the group.

Hans-Peter Plag brought up discussion about how our database and website needs the capability to identify what the users need and then have experts tell them what observations they need to get there. Hans also was frustrated with the static nature of many of the guiding documents and everybody needed to be able to access something more dynamic. This would help build direction and communication horizontally as well. He felt a lot of the information which was being discussed (such as the definition of the UIC) had been discussed and outlined before, but nobody can find this information.

In discussing how membership could be increased, Hans has observed that people are afraid of interdisciplinary workshops. The Athens workshop was good, but they invited 100 people, hoped for 50 and got 35. He has also noticed the loss of “quality” in the members meaning that they are not high level people like UNESCO etc. The location and topic of the workshops are very important. Geneva was a successful workshop because UN members etc. could just stop by. Hans also felt that it was imperative that meetings have specific outcomes and deliverables. People don’t want to come just to “talk”. He felt in the past that UIC has had more of these “talking” meetings.

There was a lot of discussion on how the GEO and committees have worked in the past. There was a difference in recollections on certain events. John wanted the group to focus on the future and what the vision is since now is the time the group can make changes.

Michael Nuihysen did a presentation on the Global Runoff Data Centre (GRDC) – see file 22-Water-Nuihysen-GRDC). Questions came up on the number of stations represented and what percent of the total available stations did he think were included in their database? For example, China had few stations and Hans knew of one in Norway that was not listed. Michael did not know since he was presenting this talk on behalf of
someone else. Mark wondered if it had the ability to become like the clearinghouse and not a warehouse since it looks like they have many functions covered (collecting data, finding users etc.). He said their relationship with the GEO is blurry, but he hopes they would be heading that way. They will talk offline.

The group dispersed to prepare their inputs for tomorrow morning’s meeting.
Group on Earth Observation User Interface Committee Meeting – Monday September 22nd through Wednesday September 24th, Boulder, Colorado, USA

Group on Earth Observation (GEO) User Interface Meeting
September 23, 2008

Agenda for Land, Biodiversity and Energy Breakout Session

Michael Brady, Natural Resources Canada. The Forest CoP.

Kathy Fontaine, NASA. Use of geostationary satellite data and GEOSS.

Hans Peter Plag, UNR. Geohazards CoP.

Doug Muchoney, GEO Secretariat and Montira Pongsiri, EPA. GEO BON CoP.

Thierry Ranchin, UIC. Energy CoP.

Montira Pongsiri, EPA. GEO Task: Ecosystems, biodiversity and human health

Gary Foley, EPA. Strategic Assessment Group work on needs.

Meeting notes for Day 2: Land, Biodiversity and Energy, Breakout session

Attendees: Michael Brady, Kathy Fontain, Hans-Peter Plag, Doug Muchoney (via phone), Thierry Ranchin, Ellsworth LeDrew, Gary Foley, Oystein.Nesje, Ken Korporal, Humbalani Mudau, others

Gary Foley chaired session.

Doug Muchoney GEO Secretariat and Montira Pongsiri, EPA. GEO BON CoP.
(see file 7-Health-Montira-Ponsigri-GEO-BON)
Gave GEO Ecosystems – 2009-11 Work Plan Power Point

Global DEM – new ecosystem mapping thrust for former DA-07-01

Discussion

Michael Brady - Is the GEO Secretariat getting support on GAP analysis? Doug – yes

Ellsworth LeDrew - Has there been an attempt to populate the registries of BON? Doug – I haven’t really looked at this. Ellsworth - Can’t find things - need a structure. Doug – this is an issue that is becoming more obvious to people working on it.

Gary Foley - Will we work more with Doug? We need commentary in the work plan – suggest people contact Doug or put in through their country. Doug – it is important that the UIC connect these various activities that the Secretariat is trying to do.

Michael Brady - Would it be worth having a table to show how the tasks in the Work Plan relate back to 7 societal benefit areas? Doug – yes, that would be a worthwhile enterprise.
Kathy Fontaine, NASA. USGEO POC, communications and outreach.

No presentation – just discussion. She works on GOES-R. She asks if users use GOES data? What data? NASA doesn’t know because people obtain data from WEB.

Gary Foley - He suggests that Kathy send something out to which people can respond.

Kathy Fontaine – Put me on the agenda for a future meeting so that I can explain what GOES is.

Michael Brady, Natural Resources Canada. The Forest CoP.
Gave Power Point presentation (see file 20-land-Brady-Forest-CoP).

Discussion

Gary Foley - Are there forest inventories that are registered with GEOSS? Michael – not yet.

Ken Korporal - Can we put these forest assessments from 3 countries on the UIC website? G. Foley said yes and that this is a good idea.

Oystein. Nesje - you mentioned the REDD process. The UN organizations had a hard time identifying a GEOSS contact.

Gary Foley - To what extent is the forest community getting involved in the ecosystem services the forests provide?

Michael Brady – we are forgetting about the social, livelihood, or economic values that the forests provide.

Humbalani Mudau - Do you have any direct connections with GMES? The answer was no.

Thierry Ranchin, UIC. Energy CoP.
Gave Energy CoP Power Point (see file 23-Ranchin-Energy-CoP)

Discussion:

Gary Foley - Suggested that Thierry write a letter to Greg Withee in order to get better representation of Energy CoP on his committee.

Ken Korporal - Can you get IEA in Paris to participate in GEOSS? Thierry – we asked and they are not interested.

Gary Foley, EPA. Birdsmammalsticks.
Gave Word talk on birdsmammalsticks (see file birdmammalandticksdraggingslideshow)

Ken Korporal - We have a friend in Ghana and lime’s disease is very bad there.

Michael Obersteiner - Benefit Assessment Now, Next, and Emerging
Gave Benefit Analysis etc. Power Point

Ellworth LeDrew - How do our results feed into your results? An obvious linkage – how do we capitalize on it? Michael – it is a process. We can determine how you get the biggest bang for the buck.
**Michael Brady** - How can we combine our results with your results on land use. Michael – we are just in the process of obtaining the results we would like on land use.

**Humbalani Mudau** - How do your results affect agriculture? Michael – there is a heat gap in Africa. You could obtain three times as many groups with the right temperatures.

Afternoon focus is on responding to the charge to the Breakout Groups. At 4:25 p.m. this group started working on the charge answering the 8 points below.

1/ Work plan: Consolidation of tasks is a good first step, but there is no coordination between sub-tasks. Suggest leads for main tasks to coordinate work of sub-tasks.

Everyone agreed with the first point. **Ellsworth LeDrew** suggested that this group should start to align CoP with the tasks from point 1 as an answer to point 2 and the rest of the group agreed.

2/ Work plan: Suggest that new tasks have references to community of practices

Point 3. **Michael Brady** wanted some clarification as to how really active the people in appendix A are? Others agreed that this should be clarified.

3/ Work plan: Should appendix A participants (list of CoP members) be rationalized

Point 4. **Ellsworth LeDrew** pointed out that the language was ambiguous. **Terry Ranchin** agreed by reading specific parts of the document. **Gary Foley** suggested that we should submit this text to a simple set of questions and edit it accordingly.

4/ Work plan: Transverse nature of UIC: propose language that describes general role and identify specific activities.

Point 4. **Ellsworth LeDrew** pointed out that this is not clearly articulated in the documentation. **Gary Foley** pointed out that in other organizations the reporting is done more frequently. Everyone agreed that the UIC committees should have a more active role and should have more power. Communication with the ExCom has been a problem. Suggestions for tasks have been proposed, but we have not received any feedback as to why they have not been accepted.

5/ Work plan: What are specific activities in 3, 6, and 12 month time frame to get CoP engaged in Common Infrastructure and Portals, (emails, workshops etc)

Point 5. **Gary Foley** pointed out that it is impossible to find data easily on the portals. He suggested and others agreed that the procedures need to be simplified. There isn’t a lot of data registered. There is a lot of metadata registered, but this isn’t easy to use.

6/ Work plan: Interaction with other GEO committees, ExCom, and Secretariat

Point 6. **Ellsworth LeDrew** pointed out that this is not clearly articulated in the documentation. **Gary Foley** pointed out that in other organizations the reporting is done more frequently. Everyone agreed that the UIC committees should have a more active role and should have more power. Communication with the ExCom has been a problem. Suggestions for tasks have been proposed, but we have not received any feedback as to why they have not been accepted.

7/ Ask how many partners are needed to do work to make each activity successful.

Point 7. Everyone thought that this was a good idea, but that it could probably be stated somewhat more precisely. The number of people depends on the nature of the activity. **Michael Brady** - How do we make the conditions for participation more explicit?
8/ Abstract UIC etc needs from collective knowledge of other meetings that will guide our activities, eg. Portal collections. How is the data used for capacity building?

Point 8. Ellsworth LeDrew - A wish has been expressed for more communication not only between the UIC Committees, but also with other relevant agencies.

Michael Brady pointed out that Lawrence’s presentation could be used as a template to apply to tasks.

5:30 p.m. Adjourn