

**The GEO 2010 Summit Task Force
Second meeting, 2-3 February 2010
Geneva, Switzerland**

Draft Summary Report

I) OPENING OF MEETING

The second meeting of the GEO 2010 Summit Task Force was held on 2 and 3 February 2010 in Geneva. The participants were Pakorn Apaphant, CEOS; Simonetta Cheli, European Space Agency; Paul Counet, EUMETSAT; Carsten Dettmann, Germany; Raimundo González Aninat, Chile; David Grimes, Canada; Alexander Gusev, Russian Federation; Mmboneni Muofhe, South Africa; Ion Nedelcu, Romania; Gilles Ollier, European Commission; José Romero, Switzerland; Aurelie Sand, France; Brent Smith, CEOS; Rio Tanabe, Japan; Joao Viane Soares, Brazil; Gregory W Withee, USA; and Jun Yu, China. The GEO Secretariat was represented by José Achache, Jinlong Fan and Michael Williams. David Grimes and Gilles Ollier co-chaired the meeting.

The meeting started with opening remarks, the introduction of participants, a review of actions from the 1st meeting (see annex 1 for updated list of actions), and a presentation of the China National Convention Center, which will serve as the Summit venue. Jun Yu explained that the first invitation letter to Ministers was now being signed by the two Chinese ministers and would be sent out shortly to the 24 ministers identified by GEO Principals. For the other Members, the letter will be addressed to foreign affairs ministers.

Gilles Ollier made a presentation on the video and other communications services that could be provided by an EC consultant.

2) REVIEW AND SELECTION OF SHOWCASES

The meeting held an extensive debate on the 19 proposed showcases that had been submitted by the GEO Committees as well as by CEOS, ESA, the GEO Secretariat, and the Task Force itself. The proposals addressed forest carbon tracking, global monitoring of greenhouse gases, climate change, climate and carbon, global monitoring of greenhouse gases from space, data sharing principles, data democracy, the GEO web portal (ESA/FAO), Architecture Implementation Pilots 2 & 3, GEOSS Architecture Implementation, end-to-end capacity building, GEO BON, the Asia/Africa Water Cycle Initiative, Health and Air Quality, the GEOWiki land cover validation tool, the Energy Community of Practice, One-Geology and One-Geology Europe, global soil mapping, and the GEO geohazards Supersites.

Building on last October's discussion, the meeting debated various messages that the showcases should communicate, including:

- GEOSS is a user driven process (as opposed to being science or provider driven)

- GEOSS responds to and supports major processes and assessments
- GEOSS complements GCOS and other processes
- By improving access to information, GEOSS leads to better decision making (the “GEO difference”)
- GEO Members should continue investing in GEOSS
- GEOSS can support economic efficiency and the “green economy”

Other recommendations including ensuring that the showcases support the Declaration, that the messages are presented in a striking way, and that the bottom-up nature of GEO is evident. It was noted that the climate issue would need to be dealt with carefully given the existence of differing national perspectives and political stances.

While confirming the value of showcases, the meeting agreed that they should be introduced at the Ministerial by some kind of general presentation on GEO. This presentation and/or document should highlight GEO’s accomplishments, its future perspectives, and its role as a coordination mechanism that is based on the infrastructure of its Members and Participating Organizations. The aim would be to tell a comprehensive story about GEOSS and its importance to policy-making for environment and natural resources. Many of the 19 original proposals might contribute to this story. For example, One Geology and GEO BON illustrate the emergence of new communities that GEO is bringing together, offering evidence of the attractiveness of the GEO model. Themes like health, energy and soil could also be embedded. The Supersites could also be referred to in this general presentation as an example of GEO’s ability to react rapidly to catastrophic events.

The discussion focused on the maturity of the Tasks underlying each proposed showcase, their political relevance and profile, and their breadth or narrowness. Some of the proposals, it was felt, would be more effective if presented in the exhibition, folded into the capacity building showcase, or featured in the general overview presentation. The eventual titles of the showcases should be centered on verbs, and not nouns, to emphasize the functionalities of GEOSS.

The meeting decided that it would be more appropriate to address data sharing, which was highlighted in the Cape Town Declaration, through the Beijing Declaration and other appropriate means rather than presenting it as a showcase. Ministers could also be encouraged to address this issue in their statements.

From the 19 original proposals, plus several others generated by the Task Force itself, the meeting developed a new list of the following six potential showcases. More detailed descriptions of the six showcases were produced by the Task Force as preliminary drafts to be sent to the showcase proponents to guide them for preparing the new template (see Annex 2 to this document):

- End-to-end capacity building. This showcase could be developed by the CBC and incorporate data democracy, the GEO wiki, education and training, gap filling, and other elements, including some of the other original 19 proposed showcases. (Template sent to five CBC co-chairs.)

- Global carbon tracking system. This showcase could feature links to ecosystems and biodiversity, focus on carbon rather than climate per se, be referenced in the Declaration, credit the various individual system components,

stress the integration of satellite and in situ, and acknowledge gaps. It should highlight the forest carbon component as a concrete example and emphasize for Ministers the unique role that GEO can play in bringing the carbon community together. (Roger Dargeville of Carbon CoP.)

- Geohazards supersite. Developed in rapid response to the Haitian earthquake, the supersite is a scientific resource that can also be increasingly operationalized. The International Charter is an operational mechanism that could perhaps be integrated into this showcase. The supersite can be positioned as crisis-driven. It lends itself to colorful and meaningful imagery. The message: GEO is flexible and can adapt rapidly to events like earthquakes. (Task leads Falk Amelung and Wolfgang Lengert.)

- GEO BON. As an emerging community bringing together over 100 organizations and national agencies, GEO BON highlights the breadth of GEO. The UN has declared 2010 the International Year of Biodiversity, and shortly before the GEO Ministerial the Conference of the Parties of the Convention on Biological Diversity will meet in Nagoya, where it may recognize GEO BON's ability to develop a 2010 baseline against which to measure a newly agreed target for reducing the rate of biodiversity loss by 2020. (Task Leads Woody Turner, Anne Larugaurderie, Rob Jongman.)

- Health services. Progress is being made on the links between health and climate and environmental change, for example with meningitis in Africa, dengue fever in Brazil, and malaria. This link however is not fully developed. (Gary Foley.)
- Asian regional showcase. Water, for example, could be used to demonstrate the regional aspect of GEO, notably via the Asian Water Cycle Initiative. The message could be that one region can learn from another, so for example the lessons of AWCI could support an African version. Given the benefits of having an Asian regional example for the Beijing Summit, China will consult with its caucus on whether this, or another showcase, should be chosen. (Jun Yu.)

The showcases are likely to be allotted a limited amount of time for presentation at the Ministerial, perhaps 5 or 10 minutes. The eventual number of showcases will impact the total time allotted to each one.

The proponents of the six potential showcases will now be asked to present revised proposals that could in their final form be presented as two-page papers for the Ministers. These proposals should be received in time for consideration at the late February teleconference. Each paper should follow this standard template:

- An appealing, verb-driven title
- A one-sentence political message
- A maximum one-page description of the showcase, including its added value for policymakers, the green economy/sustainable development and other global priorities
- Proposed presentation tools: podium presentation (including proposed length), documents & publications, multimedia, (e.g. videos), posters, images, exhibition booth, side events, etc.
- Expected response or action from Ministers

- If possible, an illustrative diagram, image or picture to accompany the text

José Achache suggested developing a way to present the showcases in a more transverse manner and offered to propose such an approach to the Task Force in the near future.

3) THE GEO-VII EXHIBITION

The exhibition will be useful for highlighting GEO's many achievements. In addition to the traditional bottom-up approach by which past exhibition have been developed, whereby countries and organizations organize their own individual stands to highlight their voluntary contributions, the Task Force suggested exploring the possibility of orchestrating cross-cutting stands for SBAs, Tasks, showcases, and so forth.

A one-line theme could be developed for the Exhibition and perhaps for the conference as a whole, as was done for Cape Town. The Task Team was invited to reflect on this and to provide comments when submitting comments on the Declaration for discussion at the February teleconference. The Secretariat will issue an early announcement to allow possible contributors to start planning for the exhibition.

4) PREPARING THE BEIJING DECLARATION

Jun Yu introduced the draft Beijing Declaration that had been prepared by a host country team. The meeting thanked China for preparing an excellent first draft. A discussion of how to advance the text further generated the following suggested messages and approaches by individual Task Force members:

- Shorten the text, particularly the front end, to two pages.
- Link it more strongly to issues of the day, such as climate, biodiversity, and the economy.
- Reconfirm the importance of implementing the data sharing principles.
- GEO has taken the Cape Town Declaration seriously and responded in diverse ways.
- Clearly demonstrate Ministers' value-added in the Summit process.
- Recognize what GEO has already accomplished.
- Given that mailing list contains mostly ministers responsible for environment and for science & technology, focus on issues of relevant to such ministers.
- Use stronger verbs than "confirm" in order to be more forward looking and action oriented.
- Call for mobilizing and further engaging Intergovernmental Organizations and other Participating Organizations.
- Invite Member governments to be more proactive.
- State that the original GEOSS vision and objectives are still valid.
- Recognize that access to better observational data and information leads to better decisions.
- Make connections to contributions that enhance economic performance.
- Highlight the need to ensure the sustainability of both space and in situ systems.
- Ensure that GEOSS implementation and the maintenance of Earth observation systems are properly resourced.

- Call for stronger support to the Trust Fund.
- Highlight the value of GEO as an international coordination mechanism.
- Bind ministers to milestones.
- Increase national Earth observation budgets.
- Recommit to existing targets and to filling gaps.
- Stress the role of GEOSS as a global public good.
- Stress that science is critical to effective policy making and too often overlooked.
- GEOSS supports the UN's Millennium Development Goals (MDGs).
- Highlight the needs of developing countries.
- Note the effective and voluntary response of GEO to the Haitian earthquake.
- Note that the Monitoring & Evaluation process will produce a major evaluation in 2013.
- Initiate a study of GEO governance.
- Encourage Members governments to establish a national GEO.
- Make an explicit link to international policy making processes, including the MDGs, Rio Conventions, green economy.
- Highlight the need for a sustainable GCI.
- Site specific examples of progress Focus on the big results we want to see for 2015 and milestones on the way.
- Address the post-2015 future of GEO. Instruct the Secretariat, in concert with the Executive Committee, to commission a study to look at next decade, 2015-2025. Given the time required this should be done now rather than in 2013.
- Post-2015, revisit the list of nine SBAs.
- Start to explore the post-2015 Targets.
- Stress the Ministers' commitments to the future of GEO.
- Address the issue of GEO's governance beyond 2015.
- Invite Ministers to set up a process to prepare the future of GEO
- Include a strong incentive to strengthen the GEO partnership, including strengthening of national GEO structures.
- Recognize the importance of developing and maintaining the GCI and the information system that at the heart of GEOSS.

The meeting agreed that the Declaration should be split into four sections: 1) a preamble forming the rationale for the Declaration; 2) a section recognizing the progress made by GEO since Cape Town; 3) a section endorsing the processes for responding to the Cape Town Declaration (e.g. data sharing principles); and 4) a concluding section looking to the future of GEO beyond 2013 and 2015.

Task Force members were invited to submit additional comments to the Secretariat by 9 February. The Co-Chairs, supported by the Secretariat, will then hold a teleconference to integrate the comments into the text. This revised version will be distributed to the Task Force for discussion at the late February teleconference.

The revised text then goes to the Executive Committee for comment at its March meeting. The Co-Chairs, supported by the Secretariat, will respond to these comments as needed and distribute a revised draft version to the Task Force for discussion at an April teleconference. The aim is to distribute the final draft version to Principals by late April; recognizing that it can take three rounds and six months to negotiate the Declaration text, it is important that this April deadline is fulfilled. China, supported by the Secretariat, will collate and integrate the comments that start to come in after April.

5) PREPARING OTHER DOCUMENTS

A general document could be developed with a 15-page introduction to GEO, including its history, membership, mandate, governance, etc. The annex, or second part, would consist of "The next 100 steps". These "steps" would consist of texts contributed by the GEO community describing their contributions and could be positioned as a mid-term assessment or progress document. The Secretariat could send out a letter to Task leads and others requesting these texts by a given deadline. This document may address the proposal above under showcases for a general introductory presentation and/or documents to preface the showcases.

Another idea was to reprise the coffee-table Tudor Rose book produced at Cape Town. This could be based on contributions from the Participating Organizations.

Additional brochures that may be needed should be considered at a later date.

6) OUTREACH ACTIVITIES

Press outreach will be further discussed by China, the Secretariat and others interested in participating in a GEO-VII Press Team.

7) FUNCTIONING OF THE TASK FORCE

The Task Force has held two meetings (October 2009 and February 2010) and two teleconferences (October 2009 and January 2010). Teleconferences will now be held on a monthly, but flexible, basis. The next teleconference will take place during the week of 20 February; this teleconference will decide on the dates of the next meeting (probably week of 14 June), unless it is decided that a face-to-face meeting should be held earlier.

On 5 March, the Task Force will forward the draft Declaration prefaced by a brief report to the Executive Committee for consideration at its 22-23 March meeting. The Task Force co-chairs plan to be available at this meeting in person and via phone hook-up. The Task Force may also propose to the Committee a first draft agenda for the Ministerial.

The actions, outputs and schedule of the Task Force will be tracked through the table attached here as Annex I.

The Co-Chairs asked the Secretariat to elaborate a process for inviting heads of Participating Organizations.

ANNEX I

2010 Ministerial Summit Task Force LIST OF ACTIONS

Item	Action	Status/outcome	Lead	Timeframe
Scope and Role of Task Force	Obtain TOR and mandate to provide strategic and oversight role for preparations of Ministerial Summit, including defining themes and content of summit products and initiating development of Declaration	Mandate from GEO-VI	Secretariat	COMPLETED
	Acquire timetable of GEO-related meetings in order to engage and inform GEO community for Summit	Meetings timetable	Secretariat	COMPLETED
	Track processes for M&E and data-sharing principles	Updated information for Task Force	Secretariat	Continuous
Themes	Assess political priorities in 2010.	Major events calendar	Secretariat	COMPLETED
	Develop key messages for Ministers. TF discussions summarized in minutes of 1 st and 2 nd meetings.	List of key messages	Co-chairs	COMPLETED
Engaging ministers	Send out first invitation letter to 24 Ministers identified by GEO Members and to foreign ministers of other member countries	Letter drafted, signed by Chinese Ministers, delivered	China co-chair with Secretariat support	COMPLETED (to confirm)

	Send out second invitation letter, with themes, messages, brochure. Update mailing list	Pending	Co-chairs supported by Secretariat	March/April
	Engage the "Sherpa" process	Pending		March/April
	Consider special events during Ministerial, e.g. Ministerial roundtable	Pending	Task Force	March/April
	Develop plan for press outreach and advance press events	Pending	Secretariat	April
	Develop draft agenda for the Ministerial	Pending	Co-chairs with Secretariat	5 March
	Invite heads of UN and other Participating Organizations.	Pending	Secretariat	March
Showcases	Identify "showcases". Criteria and process summarized in minutes of 1 st and 2 nd meetings of Task Force	18 proposals received from Committees. TF made initial selection of 6 on 3 Feb.	Task Force	February/March
	Inform Committees and teams responsible for six potential showcases of next steps	To send letter	Secretariat	February
	Inform Committees and teams responsible for other 12 proposals of recommendations for their presentation at Ministerial	To send letter	Secretariat	February
Declaration	Develop draft Declaration	China has developed 1 st draft, Task Force develops 2 nd draft	Co-Chairs with Secretariat	April

		by 5 March, incorporate ExCom comments into 3 rd draft by April for distribution to Principals in April		
Documents	Publish "The Fuller Picture"	Approach Tudor Rose in February to assess interest	Secretariat	October
	Publish "The next 100 Steps"	Initiate requests for inputs to GEO Task leads in March	Secretariat	October
Exhibition	Announce exhibition	Plan for orchestrating SBA, Task, CoP and other thematic stands	Secretariat	March
	Develop themes and encourage contributions to them	Initial themes developed	Secretariat	April
	Engage GEO community, develop floor plan, pricing, etc.	Initial announcement in February. Detailed logistical information in May	China and Secretariat	February/May
Task Force schedule	October 2009 meeting January 2010 teleconference February meeting	Minutes available	Co-Chairs with Secretariat	COMPLETED
	February teleconference Prepare document for Executive Comm	To be scheduled 22-25 Feb By 5 March	Co-chairs with Secretariat	Pending
	April teleconference June meeting	Pending	Co-Chairs with Secretariat	March

ANNEX II

DESCRIPTIVE TEXTS OF SHOWCASES

1) Capacity Building End-to-End Showcase

- 5 to 7 minutes showcasing using a cost-effective media of choice (can be further demonstrated in the exhibition)
- Show coherence with the CB strategy and the added value of GEO, involving all Members and Participating Organizations
- Show the economic and the social development values of capacity building to the developing world
- Include and contextualize the data democracy concept
- Show/demonstrate examples of the integrated approach including infra-structure, access of data, advocacy for expanding the public good vision of Earth Observation data, availability of tools, training opportunities, networking development.
- Pledge for more gap filling efforts from GEO members

2) GEO Carbon Monitoring and Tracking for more informed Decisions

The GEO Summit Task Force has reviewed all the submissions related to carbon monitoring, and forest carbon tracking, and makes the following recommendations:

Showcase overview

The Carbon Monitoring and Tracking showcase should cover all aspects of carbon monitoring in the atmosphere, ocean, and land, and include forest carbon tracking. The showcase should not consider the broader climate issue, but only focus on the “carbon observation system” part of the new GEO Target on Climate. The showcase should establish links between the GEO Carbon initiative and political imperatives, such as improving the information available for Ministerial level decisions in energy, carbon emission reduction, and green engineering. In other words, the showcase should be user driven at the highest levels. The showcase could state that more reliable and higher quality information on carbon can contribute to not only carbon emission reduction, but to conservation of ecosystems and biodiversity. The showcase should also establish the unique positioning of GEO, or GEO difference, for example to be the “honest broker” in facilitating such information on carbon and to support scientific networks on this subject.. The showcase should also clearly enunciate the potential benefits of this effort. A sentence or two “sound bite” of this showcase should appear in the Summit Declaration. It is necessary that the showcase present a coherent, coordinated and informed picture across the many existing contributing programs, such as GCOS.

Showcase content

- After stating the broader carbon monitoring objective, the showcase should point to the existing GEO Work Plan tasks, and incorporate them all into the showcase, including the tasks on forest carbon tracking.
- The showcase should site specific progress being made in these tasks, looking at both satellite (CEOS) and in situ activities. It should be careful to mention that it includes the technical standards for a global network of national forest carbon tracking systems.
- The showcase should also include a discussion of the future of these efforts in GEO, and their long term, well beyond 2015, need. The future should include consideration of future COP discussion and resolution.

3) GEO geohazards Supersites

1. The Supersites Concept

The GEO Workplan includes a Task on systematic Monitoring for Geohazard Risk Assessment. In this context GEO has launched a Supersite Initiative on Geohazard.

In crisis situations a new Supersite can be set up within 1-2 working days, allowing very fast and easy access to large data sets (e.g. satellite data). The Supersite infrastructure is based on ESA's "Virtual Archive", an asset built on a global Cloud Computing Infrastructure. It supports simultaneous large scale data access, an important asset in crisis situations.

The Supersites have been set up in collaboration among partners (Space agencies, data providers and scientists) to establish a coordinated Observation System through a single web entry point that includes data, infrastructure, and science coordination.

The Objective of the Supersites is to provide easy and fast access to a complete dataset derived from different sources and Geophysical disciplines (cross-cutting) supporting the derivation of novel science leading to risk mitigation, new applications and capacity building.

The Supersite connotation is strongly oriented to support the scientific GEO community. A link with more operational oriented initiatives (like the International Charter on Risks and Major Disasters) and user driven entities can be investigated and possibly presented at the time of the summit.

The GEO Hazard Supersite Infrastructure provides a single Web entry for access to data, by linking together data contributors, information (e.g. maps, interferograms) and scientific results.

2. The Demonstration

The usefulness of the system can be demonstrated and communicated through a showcase at the occasion of the GEO summit.

A very good example of Supersite collaboration has been demonstrated following the Haiti earthquake, where the GEO Supersite has been the central point for scientists to quickly access data, to post early results and to exchange scientific results. Furthermore the Supersite Web master has taken the central role of coordinating satellites requests on behalf of the science community. Similar Supersites can be demonstrated on natural risks at the time of the summit on recent events.

ESA offered its virtual archive as data sharing infrastructure and several agencies (e.g. JAXA) contributed with their data.

4) Expectations from a water showcase

1) Message, substance

Show the GEOSS added value in specific area of Water Management namely:

Here one important element is that global water information is by definition cross-border and that the countries are interested to access independent dataset on water availability through initiative like GEO on the regime of precipitation for instance or river parameters that are of prime interest for the management of their national water resources: so the showcase should have a global/regional dimension but should demonstrate benefits for the countries

It should demonstrate that GEO can assist in providing global assessment in the GEO water societal benefit areas because it facilitates access to data through a large network of organisations, in hopefully taking advantage of the GCI facility. At the end a global Earth

Observation resources in the domain of water should have a strong added value in aggregating regional/national resources

Will certainly provide an incomplete picture of the water resources but they should at least be convincing enough to show that GEO has the potential to perform such assessments

It should be considered how best the Asian know-how in the domain of water can be used and make visible in the showcase. In order to support global water assessment those regional and national capacity can be used (again Asian for instance) to provide information such as water quality, drought, flooding, reservoir capacity

Because we are only at the beginning of the work only interim assessment can probably be shown such as time series on precipitation. But a strong message addressed to the ministers should certainly that better monitoring of their water resources would lead to better governance and adaptation to extreme events

As the water cycle is involving the role of the ocean effect from sea-level rise could be included as well in the showcase -

The showcases should build on the capability of the GCI and be the opportunity to

1) Showcase presentation 5min? In plenary? better suited for exhibition ?

Practically this guidance document from the task force for this showcase should be sent to the organisations which have proposed it and to the water task leaders + water community of practices - meanwhile it should be copied to all committee co-chairs and GEO principals so that they can consider providing resources for the showcase

Prepare an information note that can be used for the Ministers in advance to the event on water observing systems so that the ministers are early enough part of the process

Develop a story hat can be used by a narrator or as sound track for a video or through a computer demonstration..

Set the scene by presenting the problem; drought effect and flood effect

Describe the current status with respect to observing/monitoring systems for water management and give information on how those observing systems enable to predict extreme water events and mitigate their effect

Taking advantage of existing tools such as national water accounting systems such as the one in Australia provide visual information on the state of the resources at least at the level of one of the GEO regions -, will require applying visualisation to other data sets

Identify and name early enough possible contributors

We need to guide as well on the media which is to be used for the showcase: Is it better to go for a computer demonstration? Video? Narrator?

Need for a calendar given to the showcase leader so that they know what and when to deliver requested material

A preliminary presentation of the showcases retained should take place at the next meeting of the TF

5) GEO BON

GEO BON is bringing together a large, diverse and decentralized community to improve the monitoring of all aspects of biodiversity. It engages many of the major global players, although key implementers still need to be brought on board. This extremely ambitious effort has been recognized by a decision of the Parties to the Convention on Biological Diversity. GEO BON continues to engage in the CBD process with the aim of providing a 2010 baseline against which to more rigorously measure progress, or the lack thereof, in reducing the rate of loss of biodiversity.

The GEO BON Implementation Plan will be finalized over the next several months. GEO BON has launched work on five “early achievements” to demonstrate the concept and potential impact of this effort. Two of these achievements are on track for completion, one of which is due to funding provided by Switzerland. Full-scale implementation is not likely to occur until after 2010.

6) From Science to Decisions in Health SBA: Air, Land, and Water

Emphasis: Although there were several projects being proposed or bundled under this grouping of showcases, the task group felt that a showcasing that demonstrates how implementing the vision of the GEOSS equips decision makers in the Health sector take effective decisions. There should also be a forward looking perspective added – what GEOSS can be in terms of the future.

Goal: Illustrate the science to decision-making pathway through three steps (observations and monitoring, building models and decision support tools, and sharing data/tools) in the Health SBA, through some concrete examples of initiatives currently following under the Health SBA.

Limits: timeframes for this as well as other showcases will be between 5 and 10 minutes and while the media will be of the choice of the designers, no special resources within the GEO secretariat are available to support this initiative.

Summit themes and focus: The proposed Health Showcase aligns itself with the theme “mid-term progress of the GEO 10-Year Plan” because it is a good example of how tasks and projects within an SBA can be structured to comprehensively address GEO-centric problems. The Health SBA is structured around three tasks that cover: observations and monitoring, models and decision support tools, and data/tools dissemination. Furthermore, the subtasks in the SBA include well-developed projects in air and on land, two of Earth’s elements. Water is the missing medium and a much needed addition to the SBA. Some emphasis should be placed on how to engage the water element into the future implementation of GEOSS as it pertains to Health SBA. In general, the Health SBA is remarkably well-developed for the mid-way point in the GEO 10-year Plan.