

**Science and Technology (S&T) Work Plan Review****- Discussion paper -**

*for the 13<sup>th</sup> Meeting of the GEO Science and Technology Committee,  
Ankara, Turkey, 24<sup>th</sup>-26<sup>th</sup> March 2010*

This paper describes the concept by the Science and Technology Committee (STC) to review the GEO Work Plan from a science and technology perspective. The objective is to support the discussion of the STC at its 13<sup>th</sup> meeting in order to agree on required actions for implementing this work plan review.

**Background**

One of the objectives of the STC is to “ensure scientific and technological integrity and soundness of GEO Annual Work Plans”<sup>1</sup>. The STC has included this in its Science and Technology Roadmap<sup>2</sup> in an activity to conduct a “revolving scientific review of each Work Plan [...] on grounds of scientific and technological soundness and completeness against the outstanding scientific questions and challenges in each of the SBAs”. The Annex of the Roadmap explains further what this review may encompass.

A sub-group of the STC drafted a concept involving nine expert panels (one for each SBA) that would develop their recommendation based on Terms of Reference.

At its 11th and 12th meetings, the STC discussed the process for this review. It agreed that this activity must be coordinated closely with activities conducted in Task ST-09-01 (“Catalyzing research and development funding for GEOSS”), US-09-01a (“User engagement – identifying synergies between Societal Benefit Areas”), and the Monitoring and Evaluation Team. Also, setting up nine panels was considered too taxing given that there were currently no known resources to support this effort.

In these discussions the Committee determined that the S&T Work Plan Review should be clearly distinguished from the monitoring of the scientific challenges in the Tasks for implementing GEO. These should be analyzed in Task ST-09-01, complemented by the Committee’s direct interactions with the Tasks in its “SBA Theme Sessions” at regular STC meetings and Task Symposia to be organized in the future.

In parallel to these discussions, Task ST-09-01 initiated a dialogue with the International Group of Funding Agencies (IGFA). In this context IGFA expressed a concern about the level of integration of science issues in GEO discussions and whether these are taken into account in the GEO Work Plan.

In response to this the European Space Agency (ESA) volunteered the lead to pilot a Scientific Work Plan Review in line with the objectives discussed previously discussed by the STC.

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<sup>1</sup> GEO Rules of Procedure

<sup>2</sup> Available at [http://www.earthobservations.org/documents/committees/stc/stc\\_roadmap\\_20091202.pdf](http://www.earthobservations.org/documents/committees/stc/stc_roadmap_20091202.pdf)

**Process of the S&T Work Plan Review**

The objective of the S&T Work Plan Review is to provide an assessment on how scientific issues are addressed in the current GEO Work plan. A panel of esteemed scientist will be set up and asked to prepare an assessment report to

1. State key scientific questions and challenges in the different SBAs that GEOSS could help address;
2. Evaluate how the stated objectives of the Tasks of the current GEO Work Plan, once met, would serve progress in S&T;
3. Indicate where the stated objectives should be modified or extended to improve their relevance for S&T progress;

The Scientific Work Plan Review activity lead by ESA under Task ST-09-01 will address the first two items and contribute to the third. The panel is composed of scientists whose joint expertise spans the breadth of the nine SBAs, with some attention given to geographical representation.

According to current planning, the report will be available by mid-2010. It will be submitted to the STC for review.

A more detailed review activity at the Task-level not yet addressed by this Panel should be undertaken to

4. Compile the main S&T challenges of each individual Task;
5. Evaluate whether the objectives of each Task are achievable in view of the time and S&T resources (e.g., know-how, possibly R&D funding, infrastructure) available to each Task.
6. Identify Tasks within an SBA or in separate SBAs where coordination between Tasks could better address key scientific and technical challenges.

These items must be developed in close dialogue with the Task Teams. The STC should decide how these will be addressed.

The STC should then prepare an assessment report based on the output of these activities, which will be a principal STC contribution to the preparation of the next Work Plan.

**Composition of the Panel coordinated by ESA under Task ST-09-01:**

Franco Barberi	Univ. of Rome	Disasters
J.P. Lacaux	Univ. Toulouse	Health
J Luther	Singapore Univ.	Energy
		Climate
T. Koike	Univ. Tokyo	Water and ice
J. Keys	NOAA	Water and ice
J. Lafeuille	WMO	Weather
W. Cramer	Potsdam Inst.	Ecosystems
C. Justice	Univ. Maryland	Agriculture
P. Defourny		Agriculture
B. Scholes	CSIR	Biodiversity (land)
C. Heip	Netherlands	Biodiveristy (marine)