



Strategic targets

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STC Meeting
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History

- **March 2008: GEO Executive Committee created Target Task Team (T3)**
 - **Mandate: review status of all 2-, 6-, 10-year targets from GEOSS 10-year Implementation Plan**
- **June 2008: 1st T3 Meeting**
 - **2- and 6-year targets largely met or in process through current Work Plan**
 - **Review of 10-year targets required extension through 2nd quarter 2009**
- **July 2008: T3 report to GEO Executive Committee**
 - **Requested to carry on work quickly**
 - **Produce document for GEO V Plenary of high-level targets to guide GEOSS implementation through 2015**



History

- **September 2008: 2nd T3 Meeting**
 - **Defined process, document components**
 - **Include short definition of GEOSS, based on negotiated text**
 - **Articulate high-level goals for GEOSS implementation, taken from the language of the 2007 Cape Town Declaration**
 - **Formulate 1-2 strategic targets for each transverse area and each SBA (241 originally)**
 - **Assigned strategic target drafting to T3 experts**



History

- **October 2008: 3rd T3 Meeting**
 - Writing session produced “Strategic Targets: GEOSS Implementation by 2015”
- **November 2008: T3 Teleconference**
 - Reviewed comments from all T3 members
 - Document 10 Produced for circulation 10 November 2008
 - new strategic targets respond to the call of the 2008 G8 Summit in Tokyo to accelerate GEOSS efforts to meet the growing demand for Earth observations



GEOSS Strategic Definition

The Global Earth Observation System of Systems (GEOSS) is a coordinating and integrating network of Earth observing and information systems, contributed on a voluntary basis by Members and Participating Organizations of the intergovernmental Group on Earth Observations (GEO), to support informed decision making for society, including the implementation of international environmental treaty obligations.



GEOSS Strategic Goals

- **Sustain operation of comprehensive and coordinated Earth observation networks that meet user requirements in support of informed decision making;**
- **Sustain operations of the shared architectural GEOSS components and related information infrastructure;**
- **Address the need for timely, global and open data sharing across borders and disciplines, within the framework of national policies and international obligations, to maximize value and benefit of Earth observation investments;**
- **Implement interoperability amongst observational, modelling, data assimilation and prediction capabilities;**
- **Foster research and development activities and coherent planning for future observation and information systems;**
- **Catalyze national, regional and global investments in scientific and technological advances and innovative approaches for upgrading and expanding Earth observations;**
- **Build the capacity of individuals, institutions and systems to benefit and contribute to GEOSS, particularly in developing countries;**
- **Provide a framework to identify and implement linkages across SBAs, thereby providing wider opportunities for synergistic collaboration.**



Building an Integrated GEOSS

Architecture:

1. Develop, populate, and fully maintain a user-friendly and easily accessible common infrastructure for GEOSS, which will support a global community of users by facilitating the discovery, access and dissemination of the majority of the world's Earth observation resources and services, including data, metadata and products.
2. Ensure the fully-coordinated development and implementation of future Earth observing systems, including satellite, airborne, and in-situ, as well as transition of research systems into operational systems.



Building an Integrated GEOSS

Data Management:

3. Deliver a continuous long-term stream of comprehensive and reliable data, metadata, and data and information products for a core set of essential environmental, geophysical, and geological variables needed to support all GEOSS societal benefit areas. Ensure that these comprehensive data sets, including historical data and reanalyses, are available on a continuous basis, and shared according to GEOSS Data Sharing Principles.

Capacity Building:

4. Coordinate, at national and international levels, efforts to enhance individual, institutional, and infrastructure capacities for Earth observation and derived information in all SBAs.



Building an Integrated GEOSS

Science and Technology

5. Ensure full interaction and engagement of relevant science and technology communities into GEOSS implementation so that state of the art technology and latest Earth science knowledge is continuously applied in its development and operation. GEOSS integrated observations, models and data sets will strongly support scientific research and technological development.



Building an Integrated GEOSS

User Engagement

6. Achieve the world wide recognition of GEOSS as an essential source of Earth system data and information, meeting user needs for decision making and planning, with special regard to developing countries.
7. Identify in full engagement with users a core set of cross-cutting, essential environmental, geophysical, and geological variables needed to provide data, metadata and products in support of all GEOSS societal benefit areas.



The 9 GEOSS Societal Benefit Areas

Disasters

8. Enable the global coordination of observing and information systems to support all phases of the risk management cycle associated with hazards (mitigation and preparedness, early warning, response, and recovery).

Health

9. Accelerate the development and application of Earth observation derived information, indicators, models and tools available through GEOSS that facilitate the early detection, prevention, monitoring, mitigation, and reduction of environmental risks to human health, and ensure worldwide access.



The 9 GEOSS Societal Benefit Areas

Energy

10. Provide, and increase the use of, relevant environmental, geophysical and geological data and information for planning and operation of existing and new energy systems, with emphasis on improving energy availability, minimizing environmental impact and providing information for energy policy planning.

Climate

11. Ensure the availability of the climate-relevant observations and provide global coordination of information generated to support the assessment of climate variability and change, and decision-making for adaptation and mitigation.
12. Facilitate a comprehensive global carbon observation and analysis system in support of decision-making, including monitoring and support of environmental treaty obligations.



The 9 GEOSS Societal Benefit Areas

Water

13. Develop an integrated, sustained operational global water-cycle observation system to monitor the quantity and quality of water in order to create improved availability, and to support global water management and understanding of climate variations, at national, regional and basin levels, and over all spatial distributions.
14. Increase the use of Earth observations in facilitating and enabling integrated water resource management worldwide at local and regional levels, with emphasis on improved decision support tools for water management and governance, and for monitoring and prediction of hydro-meteorological extremes, e.g., droughts and floods.



The 9 GEOSS Societal Benefit Areas

Weather

15. Improve severe weather information to mitigate loss of life and reduce property damage, close critical gaps in meteorological observations, and ensure access to weather data for the other social benefit areas.

Ecosystems

16. Improve the sustainable management and protection of terrestrial, coastal, and marine resources through the design and implementation of a comprehensive monitoring capability of all ecosystems and the human impacts on them.



The 9 GEOSS Societal Benefit Areas

Agriculture

17. Establish a coordinated global operational agricultural early warning system for food security and improved market efficiency.

Biodiversity

18. Establish a worldwide biodiversity observation network to collect, manage, share and analyze observations of the status and trends of the world's biodiversity, and enable decision-making in support of the conservation and improved management of natural resources.



Way Forward

28 November 2008:

- Announcement from GEO Secretariat to all GEO Principals soliciting comments on strategic targets and GEO 2009-2011 Work Plan

31 December 2008

- Deadline for comments on Work Plan

31 January 2009

- Deadline for comments on strategic targets

16 February 2009

- T3 teleconference to review strategic targets

2-3 March 2009

- Monitoring & Evaluation WG meeting (Geneva)

30 March-1 April 2009

- Reconciliation Meeting (Geneva)

May 2008

- 15th Executive Committee review of process (Geneva)



Thank You