
Foundational Tasks

GEO ENGAGEMENT PRIORITIES COORDINATION

Overview

The Engagement Priorities Coordination Foundational Task leads GEO's efforts in engaging key stakeholders in supporting GEO's Mission and Vision and, more specifically, on GEO's engagement priorities: the UN 2030 Agenda on Sustainable Development; the Paris Agreement on Climate Change, and the Sendai Framework on Disaster Risk Reduction. It is also responsible for coordinating engagement with UN agencies and other organizations, including those within the GEO community (that is, within GEO Member countries or Participating Organizations) and external organizations, in support of the broader mandate of GEO, including the GEO Work Programme.

Expected Outcomes

- Implementation of a consistent and coordinated GEO strategy for engaging external organizations, in particular with respect to the GEO engagement priorities, across the GEO community.
- Increased and stronger connections between GEO Work Programme activities and international policy organizations and with national ministries in GEO Member countries.
- Increased engagement of commercial sector organizations in the GEO Work Programme, especially small, medium and micro-sized enterprises (SMMEs).
- Broader awareness and understanding of GEO, its activities, and its results among users and potential users of Earth observations.
- Increased investment in the GEO Work Programme from non-traditional sources, including foundations and philanthropies.

Components

1. GEO Engagement Priorities Coordination

Coordination of GEO's engagement with UN agencies and other organizations responsible for various components of the policy frameworks. Engagement with GEO Members, Participating Organizations and GEO Work Programme activities regarding their contributions toward implementation of projects and services, and use of EO in decision making, related to the engagement priorities.

2. Commercial Sector Engagement

Identification of opportunities for commercial sector involvement in the GEO Work Programme, particularly of small, medium, and micro-sized enterprises (SMMEs), and communication of those opportunities to commercial sector organizations.

3. Communications

Development and implementation of the GEO Communications Plan, including targeted communications messages, campaigns, content and products. Fostering press relations, support to event promotion and coordination of GEO events, promotion of relevant events, opportunities and media coverage with the GEO community. Facilitation of

information flow within the GEO community, particularly through the GEO Communicators Network, liaison with GEO Work Programme activity leads, cross-promotion of activities and campaigns, promotion of brand standards, and dissemination of examples of Earth observation use and impact.

4. Resource Mobilization

Development and implementation of a strategy for outreach to potential funders. Provision of guidance and support to GEO Work Programme activities and others regarding funding applications.

Implementing Bodies

- GEO Secretariat
- GEO Climate Working Group (pending discussion by Paris Agreement Subgroup)
- GEO Sendai Framework Working Group

Point of Contact

Steven RAMAGE (GEO Secretariat) sramage@geosec.org

GEOSS DATA, INFORMATION AND KNOWLEDGE RESOURCES

Overview

This Task will analyze the current state and trends (including needs and gaps assessments), with respect to Earth observing systems (both remotely-sensed and in situ). The Task will also advocate open data sharing and data life-cycle management, while exploring methods for facilitating access to data and developing information resources based upon latest advances in technologies.

Expected Outcomes

- Promote sustainability of current Earth observing systems; advocate new fit-for-purpose systems based on needs assessments.
- Increase number of openly and freely accessible Earth observations datasets, in adherence to GEOSS Data Sharing and Management Principles.
- Lower barriers for uptake of Earth observations and open-source technology to produce applications for environmental monitoring.

Components

1. Satellite Observations:

Support GEO's efforts to promote Earth observations by providing evidence of the unique, and complementary, value of satellite data to successful delivery of GEO Flagships and Initiatives. Coordinate uptake of satellite observations into data aggregators and cloud storage for use in analyses and global policy reporting, closely linked with the GEO Knowledge Hub. Produce integrated multi-satellite Analysis Ready Datasets (ARD).

2. In situ Observations

Focus on improving access to in situ data and providing various coordination opportunities where needed, advocating new collection systems, and encouraging integration of user requirements with respect to in situ data which will be closely linked with the GEO Knowledge Hub.

3. Advancing GEOSS Data Sharing and Management Principles

Continue promotion of free, full, open and timely access to Earth observation datasets, products and services. Maintain dialogue with governments and support the uptake and implementation of the GEOSS Data Sharing and Management Principles by GEO Members and Participating Organizations, and raise awareness of the technical, organizational, and resource implications of their implementation.

4. Advocacy for Radio Frequency Protection for Earth Observation

Advocate the protection of radio-frequency bands necessary to ensure proper operation of Earth observation instruments.

Implementing Bodies

- CEOS, WMO
- GEOSS Data Sharing Working Group
- GEO Secretariat

GEOSS INFRASTRUCTURE DEVELOPMENT

Overview

The GEOSS Infrastructure Development Foundational Task leads the development and implementation of the common infrastructural elements that support the implementation of GEO Flagships, Initiatives and Community Activities, as well as the realization of the GEOSS Data Sharing and Data Management Principles.

For the purpose of this document the GEOSS Infrastructure includes, at the present time, the GEOSS Platform, GEOSS web services, and emerging new components such as the GEO regional infrastructures and the GEOSS Knowledge Hub (pending approval by GEO Plenary).

Expected Outcomes

- Broad open access and re-use of the data, information and knowledge resources developed by GEO Flagships, Initiatives and Community Activities.
- Easy discovery and access to data and information resources made available by GEOSS data providers, including customization for particular user groups or communities.
- Documented user expectations and requirements regarding GEOSS services, expansion of the user base, an improved user experience, and increased user satisfaction.
- Continual improvement of GEOSS services to ensure they meet user needs and take advantage of new developments in technologies and standards.
- GEOSS platform architecture development, operation and evolution.

Components

1. GEOSS Platform Operation

Continue to maintain the functioning (i.e. operating) of:

- GEOSS Portal as the public interface of the GEOSS Platform, with the data and information resources brokered through the GEO DAB;
- GEO DAB refining the ranking scheme used to prioritize discovery matching results and improving the online DAB statistics;
- Status Checker describing the Quality of Service of the online services published by GEOSS data providers; and
- GEO Yellow Pages service describing the GEOSS data providers and their brokering arrangements.

2. Support GEO Community data and information needs

Broker additional providers of data and other resources, addressing the request coming from the GEO Community (GEO Flagships, Initiatives, CA), in close synergy with the “GEOSS Observations, Data and Information Resources” FT.

3. GEO Knowledge Hub Development

Design and implement the GEO Knowledge Hub, as a new component of the GEOSS infrastructure. The Knowledge Hub is envisioned as a set of curated and linked documents that contain relevant information for Earth observation applications and which is integrated with the GEO website. It is intended to provide an authoritative and

validated content for evidence-based policy and decision-making. Content for the GEO Knowledge Hub will be provided by GEO Flagships, Initiatives and Community Activities.

4. GEONETCast Operation

Continue operations of this global network of sustained and cost-effective satellite-based dissemination systems and ensure close connections with the other components of the GEOSS infrastructure and with GEO Flagships, Initiatives and Community Activities.

5. GEOSS Platform Documentation

Document the GEOSS Platform architecture, services, and APIs in order to facilitate interoperability and the growth of a GEO ecosystem.

6. GEOSS Infrastructure Evolution

Advance the evolution of the GEOSS Infrastructure architecture, based on analysis of the evolving landscape of information technology, changing patterns of production and use of Earth observation products and services, and the specific user requirements expressed by GEO Flagships and Initiatives. Main actions include:

- Design the architecture of the evolving GEOSS Infrastructure.
- Develop and test new GEOSS Infrastructure functionalities, solutions and components (to address the new architecture), engaging the GEO Community.
- Facilitate the principle of interoperability of all the GEOSS components, including regional GEO infrastructures
- Facilitate the sharing and reusability of the data, services and models generated to satisfy regional GEO user needs to enrich the global GEO community.
- Prepare documentation and training materials describing the new components and solutions.

7. Open-source Solutions

Support the use of open-source software, web services and cloud computing to enable low-barrier solutions for the development of applications making use of open and freely accessible Earth observations, especially for countries of the Global South.

Implementing Bodies

- GEOSS Infrastructure Development Task Force
 - Oversees the various activities and components within the Foundation Task, ensuring their connection and synergy. (See terms of reference below).
- GEOSS Platform Operations Team
 - Daily operations of the GEOSS Platform components (GEOSS Portal, GEO DAB, Status Checker and GEO Yellow Pages), and their documentation.
- GEOSS Infrastructure Evolution Working Group
 - Responsible for the GEOSS Infrastructure Evolution task (including members from the former GEOSS EVOLVE).

- GEONETCast Operations Team
 - Daily operations and further development of the GEONETCast network.
- GEO Secretariat

Point of Contact

Douglas CRIPE (GEO Secretariat) dcripe@geosec.org

TERMS OF REFERENCE FOR THE GEOSS INFRASTRUCTURE DEVELOPMENT TASK TEAM**Purpose**

Ensure coordination, and integration as appropriate, among the various components of the GEOSS infrastructure for management and sharing of data, information and knowledge resources.

Duties

- Design the overarching architecture of the GEOSS Infrastructure, along with their main components.
- Establish performance expectations for each component and means to measure their achievement.
- Monitor progress of each component at regular intervals against the performance expectations.
- Prepare a report on progress of the Foundational Task for inclusion in the annual GEO Work Programme Progress Report.

Membership (to be approved by the Programme Board)

- Representatives from GEO Member States and Participating Organizations that provide resources to the components of this Foundational Task.
- Representatives from the GEO Secretariat

Operating Procedures

- The Task Team shall operate by consensus.
- The Task Team will select three co-chairs, one of whom nominated by the GEO Secretariat.
- There will be at least three meetings of the Task Team each calendar year.
- Meetings will generally be held as teleconferences unless there is agreement from members to hold an in-person meeting.
- Documents for decision by the Task Team should be distributed at least two weeks in advance of the meeting unless there are exceptional circumstances.

GEO WORK PROGRAMME SUPPORT

Overview

The GEO Work Programme is the primary coordination and planning instrument used by GEO to select and prioritize its activities. The GEO Programme Board is the governance body which is tasked with overseeing the development, implementation and monitoring of the GEO Work Programme. The purpose of the GEO Work Programme Support Foundational Task is to provide the operational capacity to advise the GEO Programme Board and to implement their decisions and recommendations.

Expected Outcomes

- GEO Programme Board has the information, advice and other support required to fulfill its functions and duties.
- Decisions by GEO Members and GEO governing bodies are informed by analyses and reports based on regular collection of data and information on GEO Work Programme activities.
- Leads and participants of GEO Work Programme activities have the information, tools and support required to effectively implement their activities.

Components

1. Programme Board Support

Preparation of Programme Board meeting agendas and documents, in consultation with the Programme Board co-chairs. Logistics, analysis and document support to Programme Board subgroups.

2. GEO Work Programme Development

Coordination of the development process for triennial GEO Work Programmes. Review of Implementation Plans for GEO Flagships, Initiatives and Community Activities. Drafting of Implementation Plans for GEO Foundational Tasks. Preparation of GEO Work Programme summary documents and updates.

3. GEO Work Programme Monitoring

Development and coordination of requests for data and information from GEO Work Programme activities. Maintenance of databases for GEO Work Programme monitoring. Analysis of monitoring data and preparation of reports on progress in the GEO Work Programme. Development and production of indicators derived from monitoring data.

4. Liaison with GEO Work Programme Activities

Implementation of regular contact with GEO Work Programme activity leads. Provision of guidance and assistance to GEO Work Programmes.

5. GEO Work Programme Capacity Development

Provision of targeted advice and assistance to GEO Work Programme activity leads and participants to enable them to design, implement and measure the effectiveness of co-design and co-production, user engagement and capacity development within their activities.

Implementing Bodies

- GEO Secretariat
- Capacity Development Working Group

Point of Contact

Craig LARLEE (GEO Secretariat) clarlee@geosec.org

GEO SECRETARIAT OPERATIONS

Overview

The GEO Secretariat Operations Foundational Task is intended to support sound management and administration of the resources of the GEO Trust Fund and to provide logistical support for GEO statutory meetings such as Ministerial Summits, GEO Plenary, GEO Executive Committee and GEO Programme Board.

Expected Outcomes

- GEO Trust Fund resources are managed in accordance with Annex D of the GEO Rules of Procedure.
- Secretariat human resources are allocated and managed to support the highest priorities of GEO, within the framework of the staffing plan approved by GEO Executive Committee.
- Financial and in-kind resources to the GEO Trust Fund and Secretariat are available to support the activities of the Secretariat, as approved by the GEO Executive Committee.
- Effective and efficient conduct of GEO meetings.

Components

1. Management of the GEO Trust Fund

Preparation of a draft Trust Fund Budget and financial income and expenditure accounts. Management of Secretariat mission travel planning and reporting. Management of incoming contributions. Management of extra-budgetary resources for specified activities and associated reporting requirements. Contract administration. Support to the Budget Working Group.

2. Management of Secretariat Human Resources

Preparation of staffing plans. Management of staff recruitment and performance review processes. Coordination of secondments and liaison with home institutions.

3. Conference and Meeting Management

Coordination with external meeting hosts. Preparation of Ministerial Summit, Plenary and Executive Committee documents. Participation on and support to working groups for the preparation of GEO Plenary meetings and Ministerial Summits. Management of registration processes and support to participants from developing countries.

4. Relations with GEO Members, Participating Organizations and GEO Associates

Maintenance of contact databases of GEO Members, Participating Organizations and Associates. Management of processes for review of Participating Organization and Associate applications. Implementation of activities to mobilize financial and in-kind resources for the GEO Trust Fund and GEO Secretariat.

5. Coordination of GEO Evaluations

Preparation of evaluation terms of reference and briefings for GEO governance bodies. Coordination of calls for nomination to evaluation teams and provision of support to evaluation teams.

Implementing Bodies

- GEO Secretariat
- Budget Working Group
- GEO Week and Ministerial Summit Working Groups
- Host nations of GEO Plenary and other GEO meetings.

Point of Contact

Patricia GEDDES (GEO Secretariat) ppeddes@geosec.org