Foundational Task Descriptions and Terms of Reference for Working Groups and Task Team

This document is submitted to the Program Board for decision.

1 INTRODUCTION

A key section of the GEO Work Programme Summary Document is the description of the Foundational Tasks. Since several of the Foundational Tasks will be implemented by Working Groups open to the participation of members of the GEO Community, these descriptions are also complemented by the Terms of Reference for the various Working Groups. As well, one Foundational Task will be coordinated through the mechanism of a Task Team, for which there is also a Terms of Reference. The Foundational Task descriptions and Terms of Reference for the Working Groups and Task Team have been circulated for consultation during July and August and have been revised since version 2 of the GEO Work Programme Summary Document was circulated. The current drafts of these documents are provided here for review and approval by the Programme Board.

The proposed Foundational Task descriptions are appended as Annex A to this document.

The proposed Working Group and Task Team Terms of Reference are appended as Annex B.

2 DEVELOPMENT OF THE DRAFTS

Initial drafts of most of the documents were prepared by the GEO Secretariat. The drafts were reviewed, and in some cases drafted, by the following groups as listed below:

- **GEOSS Infrastructure Development Foundational Task description** and the **GEOSS Infrastructure Development Task Team Terms of Reference** – reviewed by the Programme Board Foundational Task Subgroup

- **Capacity Development Working Group Terms of Reference** – reviewed by the Capacity Building Working Group

- **Climate Working Group Terms of Reference** – reviewed by the Programme Board Paris Agreement Subgroup

- **Data Sharing and Management Working Group Terms of Reference** – reviewed by the Data Sharing Working Group and the Data Management Principles Working Group

- **Disaster Risk Reduction Working Group Terms of Reference** – reviewed by the Programme Board Sendai Subgroup

Each of the groups provided valuable comments and input during the process.

Previous versions of the descriptions and terms of reference were included in both version 1 and version 2 of the GEO Work Programme Summary Document (terms of reference only as linked documents in version 2). These documents were made circulated to the GEO community (for version 1) and to GEO Principals (for version 2). No comments were received by the Secretariat on these parts of the GEO Work Programme as a result of these distributions.
Following the input from each of the reviewing groups, the Secretariat made some additional edits to standardize the format and language of the Terms of Reference where they were similar across the various Working Groups. These standard sections are shown in blue text in Annex B.

3 OTHER CONSIDERATIONS

The four Working Groups and one Task Team may not encompass all such groups needed to implement the Foundational Tasks. In particular, there may be a need to define terms of reference for additional implementing bodies under the GEOSS Infrastructure Development Foundational Task, and possible also for the GEOSS Data, Information and Knowledge Resources and Engagement Priorities Coordination Foundational Tasks.

As a general principle, it would be preferable to put in place clear terms of reference for any implementing bodies that are not GEO bodies defined in the Rules of Procedure or specific contributing organizations, such as a GEO Participating Organization. This is especially relevant for those implementing bodies seeking additional collaboration from GEO community members, as the terms of reference would inform prospective contributors regarding the mandates and expectations for each of the bodies. Development of such terms of reference for these additional bodies will likely need to be deferred until after the initial approval of the 2020-2022 GEO Work Programme so that these bodies have time to meet and discuss what such terms of reference should look like. These additional terms of reference would need to be approved by the GEO Plenary following review and recommendation by the Programme Board.

It will be noted that the Foundational Task descriptions are also much less detailed than the Implementation Plans for GEO Initiatives and even than the Community Activities. One reason for this is that the parts of the Foundational Tasks that are implemented by the Secretariat are monitored and directed by the GEO Executive Committee in a way that does not apply to other GEO Work Programme activities. It is also due to the fact that the Working Groups and Task Team that support the Foundational Tasks are only in the process of being established and have yet to meet to determine their specific plans.

4 RECOMMENDATION

The Secretariat recommends that the Programme Board approve the Foundational Task descriptions in Annex A and the Working Group and Task Team Terms of Reference in Annex B for recommendation to the GEO-XVI Plenary as part of the 2020-2022 GEO Work Programme.

It is also recommended that the Programme Board request each of the Working Groups and the GEOSS Infrastructure Development Task Team to present a three-year plan of key activities and deliverables to the 17th Programme Board meeting (expected in May 2020).
ANNEX A – FOUNDATIONAL TASK DESCRIPTIONS
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 Earth observations 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
- GEO Disaster Risk Reduction 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 remote sensing 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 on the latest advances in technologies.

Expected Outcomes

- Increased sustainability of current Earth observing systems; make recommendations for new fit-for-purpose systems based on needs assessments.
- Increased number of openly and freely accessible Earth observations datasets, in adherence with the GEOSS Data Sharing Principles and GEOSS Data 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 uptake of 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. Advocate production of integrated multi-satellite Analysis Ready Datasets.

2. In situ Observations
   Improve access to in situ data and provide coordination and repository services where needed. Advocate new data collection systems and encourage 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 dialog 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.

Implementing Bodies

- Committee on Earth Observation Satellites (CEOS)
- GEOSS Data Sharing and Management Working Group
- GEO Secretariat

Point of Contact
Douglas CRIPE (GEO Secretariat) dcripe@geosec.org
GEOSS Infrastructure Development

Overview
The GEOSS Infrastructure Development Foundational Task leads the development and implementation of the common infrastructural elements that constitute the implementation of GEOSS and, by extension, support the Earth observation data and information needs 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 GEO Knowledge Hub (pending approval by GEO Plenary).

Expected Outcomes
- Open access to, and re-use of, the data, information and knowledge resources developed by (or made available to) 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 and increased user satisfaction through improved user experience.
- Continual improvement of GEOSS services to ensure they meet user expectations and needs, taking advantage of new developments in technologies and standards.
- GEOSS Platform architecture development, operation and evolution.

Components
1. GEOSS Platform Operation
   Maintain current operating functionalities, including:
   - 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 requests coming from the GEO community (GEO Flagships, Initiatives, Community Activities), in close synergy with the “GEOSS Observations, Data and Information Resources” Foundational Task.

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 authoritative, validated and reproducible content for evidence-based reporting on policy commitments 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 data and information dissemination systems;
   - Ensure dissemination of data and information through GEONETCast that directly supports GEO Flagships, Initiatives and Community Activities.
   - Support maintenance, training and installation of GEONETCast user reception stations; and
   - Consider complementarities between GEONETCast and other GEOSS data access mechanisms.

5. GEOSS Platform Documentation
   Document the GEOSS Platform architecture, services, and application programming interfaces (APIs) to facilitate interoperability and the growth of a GEO data and information 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 GEOSS components, including regional GEO infrastructures
   - Facilitate the sharing and reusability of the data, services and models generated to satisfy user needs of both the regional and global GEO communities.
   - 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 developing countries.

Implementing Bodies

- GEOSS Infrastructure Development Task Team
- Oversees the various activities and components within the Foundation Task, ensuring their connection and synergy.

- **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 component (including members from the former GEOSS EVOLVE).

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

- **GEO Secretariat**
  - Development of the proof of concept for the GEO Knowledge Hub.
  - Coordination of efforts on Open-source solutions.

**Point of Contact**
Douglas CRIPE (GEO Secretariat) dcripe@geosec.org
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 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

3. GEO Work Programme Monitoring and Liaison

4. 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

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.
- GEO evaluation teams

Point of Contact

Patricia GEDDES (GEO Secretariat) pgeddes@geosec.org
ANNEX B – TERMS OF REFERENCE FOR FOUNDATIONAL TASK WORKING GROUPS AND TASK TEAM
Capacity Development Working Group
Terms of Reference

Purpose
The Capacity Development Working Group (CDWG) will facilitate GEO’s efforts on capacity development, promoting the principle of co-creation and providing conceptual support to the design, development, implementation and evaluation of capacity development activities at various levels of intervention.

Duties
- Support GEO Flagships, Initiatives and Regional GEOs, on request, in the design, implementation, and evaluation of capacity development interventions.
- Develop, improve, and provide capacity development tools for use by the GEO community.
- Collect, document, and share good practices for capacity development related to Earth observations.
- Promote, facilitate and analyze the inclusion of capacity development data, information and knowledge through the GEO Knowledge Hub.
- Organize seminars, teleconferences, side-events and other means for disseminating information related to capacity development for Earth observations;
- Support the planning and implementation of impact assessments for capacity development activities within GEO.

Membership
- Membership in the Working Group is open to any individual willing to participate in the implementation of the duties of the Working Group. Members are not required to be nominated by officially-recognized organizations within GEO.

Working Arrangements
- There will be at least two co-chairs of the Working Group, who will be selected by and from among the Working Group members. Preference in the selection of co-chairs will be given to representatives from the Regional GEOs.
- The Working Group will meet at such times and places as determined by its members and will work mainly through teleconferences and e-mail.
- The Working Group will provide periodic reports on its activities to the GEO Secretariat as part of GEO Work Programme monitoring. It may also bring specific issues to the GEO Programme Board as needed.
- The Working Group may establish subgroups to assist in fulfilling its duties.
- Administrative support to the Working Group will be provided by the GEO Secretariat.
Duration

- These Terms of Reference will remain in effect for the period of the 2020-2022 GEO Work Programme. They may be revised with the approval of the GEO Programme Board.

Working Group Co-Chairs

To be determined

GEO Secretariat Point of Contact

Joost TEUBEN  jteuben@geosec.org
Climate Working Group
Terms of Reference

Purpose
Ensure a coherent and cross-cutting GEO approach to advance the use of Earth observations in support of the Paris Agreement on climate change.

Duties

- Identify how GEO/EO can support countries in meeting their Nationally Determined Contributions (NDCs);
- Review and internalize the IPCC and other relevant reports to identify gaps (observations, etc.) that GEO could address;
- Review the Implementation Plans of all GEO Work Programme activities relevant to the Paris Agreement to identify potential gaps and synergies;
- Review and recommend from these GEO Work Programme Activities where GEO is best placed to act, e.g., climate modelling/science; mitigation, adaptation;
- Facilitate communication between the leads and participants of these GEO Work Programme activities;
- Stimulate the initiation of projects, case studies or pilots involving participants from multiple GEO Work Programme activities to enhance collaboration across GEO and to address identified gaps; and
- When and where appropriate, act as a focal point for engagement with external stakeholders and international organizations and processes relevant to the Paris Agreement.

Membership

- Membership in the Working Group is open to any individual willing to participate in the implementation of the duties of the Working Group. Members are not required to be nominated by officially-recognized organizations within GEO.
- Participation by individuals involved in related GEO Work Programme activities is encouraged.
- Each GEO Work Programme activity with deliverable addressing the Paris Agreement should identify a liaison member to the Working Group.
- Representatives of key UN and international organizations (UNFCCC, IPCC, WMO, GCOS, UNEP, CEOS, CGMS, etc)
- Representatives of national and regional stakeholders
- Representatives of key science bodies (GCP, IUGG, etc)
- Secretariat staff who has expertise in Climate will provide support to the activities of the Working Group, as allocated to the Engagement Priorities Coordination Foundational Staff.
Working Arrangements

- There will be at least two co-chairs of the Working Group, who will be selected by and from among the Working Group members.

- The Working Group will meet at such times and places as determined by its members and will work mainly through teleconferences and e-mail.

- The Working Group will provide periodic reports on its activities to the GEO Secretariat as part of GEO Work Programme monitoring. It may also bring specific issues to the GEO Programme Board as needed.

- The Working Group may establish subgroups to assist in fulfilling its duties.

- Administrative support to the Working Group will be provided by the GEO Secretariat.

Duration

- These Terms of Reference will remain in effect for the period of the 2020-2022 GEO Work Programme. They may be revised with the approval of the GEO Programme Board.

Working Group Co-Chairs

To be determined

GEO Secretariat Point of Contact

Sara VENTURINI  sventurini@geosec.org
Data Sharing and Management Working Group
Terms of Reference

Purpose
The Data Sharing & Management Working Group (hereafter referenced as “DSMWG”) will support the Group on Earth Observation (GEO) in its goals to put into practice the GEOSS Data Sharing and Management Principles and associated Implementation Guidelines. It is responsible for implementing the element, Advancing GEOSS Data Sharing and Management Principles, within the Foundational Task, GEOSS Data, Information, and Knowledge Resources, in the GEO Work Programme.

The DSMWG is convened to work with GEO collectively, including GEO Members and Participating Organizations and all other relevant task teams in the Work Programme, to enable effective uptake and implementation of the GEOSS Data Sharing and Management Principles by:

Duties

- Updating the Implementation Guidelines for the Data Sharing and Management Principles as needed to improve the quality, accessibility, and management of available data, information and tools and to support their integrated use.

- Providing guidance and design input to relevant Work Programme tasks, including the GEO Knowledge Hub, with respect to knowledge resources and knowledge management as they relate to data sharing and data management.

- Keeping track of trends in international Open Data and scientific data management practices, collaborating and contributing to the evolution of the next generation of Data Sharing and Management Principles and Implementation Guidelines as necessary.

- Analyzing and advocating the benefits of improved Data Sharing and Management to raise global awareness, particularly in developing countries, about the value of open data, products and services provided through GEOSS.

- Promoting national coordinating mechanisms to implement the Data Sharing and Management Principles and monitoring data sharing and data management progress by the GEO Members.

- Addressing interoperability of data, products and services across various SBAs, through recommended mechanisms to share data as part of GEOSS, promoting simplicity/standardization to minimize the barriers to data exploitation.

- Identifying, analyzing, and describing best practices related to legal interoperability, ethical, privacy, intellectual property, data sharing, data management and other concerns.

- Monitoring, interpreting, and adjusting use metrics to gauge the utilization of shared resources and their value to both data providers and data users, within and across SBAs, and the trustworthiness for enabling the use of shared resources.

Membership

- The DSMWG shall be composed of individuals nominated by GEO Members and Participating Organizations, in particular those with relevant expertise, with administrative support provided by the GEO Secretariat.
Working Arrangements

- There will be at least four co-chairs of the Working Group, who will be selected by and from among the Working Group members.
- The Working Group will meet at such times and places as determined by its members and will work mainly through teleconferences and e-mail.
- The Working Group will provide periodic reports on its activities to the GEO Secretariat as part of GEO Work Programme monitoring. It may also bring specific issues to the GEO Programme Board as needed.
- The Working Group may establish subgroups to assist in fulfilling its duties.
- Administrative support to the Working Group will be provided by the GEO Secretariat.
- The DSMWG will participate in GEO events as appropriate.
- The DSMWG will coordinate with relevant international bodies on the Open Data and scientific data management practices.
- The DSMWG will work with the relevant GEO bodies to ensure that the framework for open access to data is addressed in the implementation of the GEOSS Platform and GEO Initiatives, Flagships, and community activities.
- The DSMWG will coordinate its work with other GEO tasks as appropriate.
- The DSMWG will support initiatives in developing countries regarding open sharing of data.
- Specific research work or investigations may be assigned by the DSMWG to sub-teams of individual experts to address identified issues at the appropriate level of detail and professional expertise.

Duration

- These Terms of Reference will remain in effect for the period of the 2020-2022 GEO Work Programme. They may be revised with the approval of the GEO Programme Board.

Working Group Co-Chairs

To be determined

GEO Secretariat Point of Contact

Paola DE SALVO  pdesalvo@geosec.org
Disaster Risk Reduction Working Group
Terms of Reference

Purpose
Ensure a coherent and cross-cutting GEO approach to advance the use of Earth observations in support of the Sendai Framework for Disaster Risk Reduction.

Duties
- Enable discussion and communication on disaster-related activities within the GEO Work Programme.
- Foster support for disaster related activities between the GEO community and national, international and intergovernmental bodies.
- Promote the sharing of data from different platforms, technologies, themes and domains.
- Connect different scales of activities – from local, national, regional to global.
- Monitor the uptake of GEO’s activities in support of the Sendai Framework.
- Seek coherence and collaboration amongst the post-2015 development agendas and GEO’s areas of focus, including the identification of common metrics and opportunities for joint reporting.
- Promote to key stakeholders and partners the value of EO and information provided by GEO.
- Where appropriate, act as a focal point for the engagement with external stakeholders and international organizations and processes relevant to the Sendai Framework;
- Review the Implementation Plans of all GEO Work Programme activities relevant to the Sendai Framework for disaster risk reduction, and to identify potential gaps and synergies;
- Facilitate communication between the leads and participants of these GEO Work Programme activities; and,
- Stimulate the initiation of projects, case studies or pilots involving participants from multiple GEO Work Programme activities to enhance collaboration across GEO and to address identified gaps.

Membership
- Membership of the Work Group will be open to any representative of a GEO Member, Participating Organization or GEO Associate.
- Participation by individuals involved in related GEO Work Programme activities will be encouraged.
- Each GEO Work Programme activity with deliverable addressing the Disaster Risk Reduction should identify a liaison member to the Working Group.
- Representatives of key UN and international organizations and of national and regional stakeholders will be invited to participate.
Working Arrangements

- There will be at least two co-chairs of the Working Group, who will be selected by and from among the Working Group members.

- The Working Group will meet at such times and places as determined by its members and will work mainly through teleconferences and e-mail.

- The Working Group will provide periodic reports on its activities to the GEO Secretariat as part of GEO Work Programme monitoring. It may also bring specific issues to the GEO Programme Board as needed.

- The Working Group may establish subgroups to assist in fulfilling its duties.

- Administrative support to the Working Group will be provided by the GEO Secretariat.

Duration

- These Terms of Reference will remain in effect for the period of the 2020-2022 GEO Work Programme. They may be revised with the approval of the GEO Programme Board.

Working Group Co-Chairs

To be determined

GEO Secretariat Point of Contact

James Norris  jnorris@geosec.org
GEOSS Infrastructure Development Task Team
Terms of Reference

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

Working Arrangements
- The Task Team shall operate by consensus.
- The Task Team will select three co-chairs, one of whom nominated from 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.

Duration
- These Terms of Reference will remain in effect for the period of the 2020-2022 GEO Work Programme. They may be revised with the approval of the GEO Programme Board.

Working Group Co-Chairs
To be determined

GEO Secretariat Point of Contact
Douglas CRIPE dcripe@geosec.org