

# **Report from the Data Working Group**

This document is submitted by the Data Working Group to the Programme Board for information.

## 1 INTRODUCTION

Since its creation, the Data Working Group (Data WG) has met 3 times: July 2020, September 2020, and November 2020. During these three meetings, and with the support of questionnaires, the Data WG elected four co-chairs and decided to focus its activities through three subgroups.

Two co-leads have been identified for each subgroup through a request for volunteers, giving attention to gender and geographical balance, followed by voting by Data WG members.

## 2 SUBGROUP LEADS

In Situ Data Subgroup: Helen Glaves (United Kingdom) and Henrik Andersen (European Environment Agency).

Data Ethics Subgroup: Lea Shanley (United States) and Stefano Nativi (European Commission).

Data Sharing and Data Management Principles Subgroup: Kamila Kabo-bah (Ghana) and Chris Shubert (Austria).

## 3 WORK PLANNING

Through the support of online questionnaires, the Data WG members have provided comments on each of the Subgroup work plans. Subgroup co-leads have met regularly since November 2020, together with the GEO Secretariat, to define objectives and milestones for each subgroup.

The Data Ethics subgroup met in late December to discuss topics of interest to the subgroup. Initial points of discussion included the following:

- Earth Observation data licensing interoperability to support open data/access and data sharing.
- Looking at the issue through the lens of data access during the COVID pandemic, for example, documenting refugee movement, environmental change, etc.
- Privacy and ethics related to Earth observation, including Indigenous data sovereignty and privacy.
- Ethical, legal, and policy issues related to Earth observation, artificial intelligence, and bias.

The In Situ Data subgroup met in early January to discuss their initial work plan. The results of the meeting are shown in Figure 1 below:



### Possible roles of GEO as regards 'in-situ' data. GEO could focus on:

- · Promoting FAIR and open data;
- Defining and advocating data management strategies, best practices and other standards relevant for in situ data;
- · Demonstrating and communicating the importance of in situ data;
- Identifying main challenges and barriers against efficient use of 'in situ' data;
- Justifying continued and sustainable funding of in situ data gathering, observing networks, and similar.
- Highlighting the role of citizen science for augmenting in-situ data collection

### Derived actions will be application specific:

- As a start the Subgroup will focus on analysing in-situ data use, priorities, challenges, and requirements of key GEO Flagship projects;
- The results may lead to general conclusions and/or specific actions related to GEO's 'in-situ' data roles:
- The results may also lead to a revision or precision of GEO's 'in-situ' data roles.

#### Audience:

- In situ data owners and providers, e.g. organisations and networks (relevant for the selected applications);
- · Standards bodies
- Funding agencies/sponsors
- GEO Members

#### **Practical steps:**

- Develop a clear understanding of available resources and subgroup member's areas of interest and expertise:
- Define realistic milestones and deliverables for the coming 12 months;
- Select relevant GEO Flagships or other projects, i.e. the application areas;
- · Collect information based on on-line reports and similar;
- · Develop a questionnaire and interview experts from the selected projects;
- Produce a cross-cutting analysis and propose further steps and actions.
- Identify/map GEOSS platform brokered in-situ data providers and identify gaps
- · Identify and showcase specific use cases to illustrate benefits, challenges, etc.
- Coordinate with other subgroups and external activities for knowledge exchange and to avoid
  of duplication of effort

Figure 1: In Situ Data Subgroup Work Plan

The Data Sharing and Data Management Principles subgroup will meet for the first time as on 20 January 2021. The main identified elements of discussion identified by the subgroup co-leads are:

- Landscape analysis of the GEOSS Data Sharing Principles (DSPs) and Data Management Principles (DMPs) within the GEO Work Programme.
- Identification of champions to implement the DSPs and DMPs within the GEO Work Programme.
- Monitor trends to improve the Implementation Guides for the DSPs and DMPs, including identifying relationships to the FAIR Principles and TRUST Principles.
- Develop best practice guidelines for implementation by GEO Members.
- Data sharing (making more datasets openly available) and data interoperability (best practices for improving interoperability).
- Data quality:
  - What constitutes quality data in the GEO context?
  - o Is it feasible and desirable for GEO to create a data quality seal or data quality indicators (for example, GeoViQua)?
- Importance of advocating the CARE Principles for Indigenous Data Governance.

## 4 WORK PLAN CONSOLIDATION

On 15 January 2021, the Data WG co-chairs and the subgroup co-leads met to share their initial draft work plans with the intent to harmonize, identify common grounds, and minimize overlaps.

On 20 January 2021, the Data WG members met in three parallel calls (one for each subgroup) to continue to discuss their respective work plans. The work plans are expected to be finalized by the end of February 2021.