

Report of the Data Working Group

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

1 INTRODUCTION

The Data Working Group (Data WG) continues to hold bi-monthly meetings, along with alternating bi-monthly Data WG co-chair and subgroup-lead coordination calls.

The Data WG considered a request from the American Geographical Society for endorsement by GEO of the [Locus Charter](#), calling for ethical treatment of location data. A few issues requiring clarification were identified by the Data WG, such as the feasibility of developing a set of principles with respect to a topic as broad as 'location data'; whether official support from GEO could be viewed as limiting commitments to full and open access to data; if the Charter is targeting individual privacy versus industry standards; and whether the broader geospatial community has been sufficiently consulted to ensure buy-in with respect to the charter. The Data WG will seek to dialogue with the Locus Charter authors before the end of the year to address these concerns.

2 IN SITU SUBGROUP

The In Situ Subgroup (IS-SG) has been active in developing an in situ data strategy for GEO that will focus on needs of GEO Work Programme activities when dealing with in situ data. Apart from the survey done in collaboration with the Data Sharing and Data Management Principles Subgroup (DSDMP-SG), a series of consultations with selected GEO Work Programme (GWP) activities will help understand what their concrete needs are in term of in situ data, why those datasets are not available and how to work with the providers to help GWP activities access them.

The subgroup has also organized a [session during the 2021 GEO Symposium](#) where GEOGLAM, GEO Mountains and the Trans-African Hydrometeorological Observatory (TAHMO) network have presented their current situation and efforts to bring more in situ data to use. This is part of a broader task that aims at highlighting the benefits of in situ data sharing and use.

3 DATA SHARING AND DATA MANAGEMENT PRINCIPLES SUBGROUP

The [GEO Data Sharing and Data Management Principles](#) provide a set of stated values and objectives for the GEO community that define high-level target conditions under which data should be shared in an effective manner, under the digital transformation in respect like machine actionable processing.

The DSDMP-SG is working in two focus areas:

- Area A will focus on the process of revising the principles; and
- Area B will focus on the promoting task to support and measure real implementation.

The revision process (Area A) is ongoing, where experts investigate current and anticipated challenges to data processes, such as analysis-ready data and data cube frameworks. The revision will describe the value of, and relationship between, several sets of data principles which are operational in some organizations (such as NASA and the European Environment Agency) that go beyond the [FAIR](#) and [TRUST](#) principles. It will then describe the relationships among these principles to enable understanding of the overlaps, benefits, gaps and barriers. The DSDMP-SG will also relate the principles to the information lifecycle so data providers may know when and why to apply the various principles. This is intended to support the value and importance of the GEO Data Sharing and Data Management Principles as open and applicable frameworks.

The elaboration of benefits and synergies of the GEO principles are an objective in Area B. One aspect is to promote GWP activities with regard to the entire Data WG. The DSDMP-SG has designed a template and is developing success stories about the implementation of GEO Data Sharing and Data Management Principles. This activity will also reach out to the GEO Climate Change and Disaster Risk Reduction Working Groups to increase the interaction across GEO Working Groups.

4 LAW AND POLICY SUBGROUP

Given the disparate nature of the topics under consideration, the Data Ethics, Legal and Policy Subgroup decided to split into two subgroups to sharpen their focus. Thus, the Law and Policy Subgroup (LP-SG) and the Data Ethics Subgroup (DE-SG) were formed in July 2021.

With respect to the sufficiency of existing open data licenses to protect from potential liability issues, the LP-SG examined the [Report on Data Sharing Principles Post-2015 and Mechanisms to Ensure Legal Interoperability of Shared Data](#) presented to GEO-XI Plenary (November 2014), to determine whether the conclusions and recommendations it contained were still valid. A few gaps were identified relating to legal interoperability issues in areas such as development of code/algorithms, impacts of cloud computing sovereignty, use of drone imagery, and rights of indigenous communities with regard to open data. The LP-SG is considering issuing a series of policy briefs, each of which will focus on a particular issue and provide recommendations and strategies to respond to questions of legal interoperability.

5 DATA ETHICS SUBGROUP

The DE-SG has continued its work in developing a report on legal, privacy, and ethical issues with respect to cloud computing environments. Questions under consideration include whether existing user agreements for use of cloud platforms provide:

- Sufficient transparency for users to understand risks and benefits;
- Adequate protection to users in key areas such as privacy, liability, security, and user intellectual property rights;
- Appropriate guidance on responsible use and potential misuse of cloud services;
- Adequate warning about uncertainties and complexity of applicable policies and laws due to jurisdictions of provider and user; and
- Potential reuse and redistribution of outputs.

In light of findings, the report aims to explore whether GEO should establish guidelines for user agreements to improve consistency and encourage stronger protections for all stakeholders.