

Work Plan [version 1.1]

of the **Data Sharing & Data Management Principles Subgroup of GEO Data Working Group (Data-WG)**

INTRODUCTION

The GEOSS Data Sharing Principles (DSP) and the GEOSS Data Management Principles (DMP) form a comprehensive set of principles and technical guidance for how to share and manage data. These Principles address the need for discovery, accessibility, usability, preservation, and curation of the data resources that are made available for society, research, and decision making.

The importance of digital economy mechanisms to facilitate decision making and foster information-intensive processes are described in the GEO Strategic Plan 2016-2025 and the Canberra Declaration. The GEO Data Working Group (DWG) was established in 2020 and developed [Terms of Reference](#) (ToR) and established three Subgroups: 'Data Sharing and Data Management Principles', 'Data Ethics, and 'In-situ Data.'

SUBGROUP PURPOSE & ACTIVITIES

The 'Data Sharing and Data Management Principles Subgroup' will ensure an interface with the GEO Work Programme activities by identifying barriers to data sharing and proper data management by multiple data providers within the GEO framework. This scope was encouraged by the Lead Co-Chair Goals for 2021 and recently by the GEO Programme Board at the end of March 2021.

The subgroup will follow three initial near-term objectives (areas) to enable effective uptake and promote the implementation of the GEOSS Data Sharing and Data Management Principles.

- A. **Describe the status of implementing the GEOSS Data Sharing Principles and GEOSS Data Management Principles [May-November 2021]**
 - Produce landscape and implementation analyses of GEO Flagships and GEO Initiatives, conduct an analysis of data use, challenges and requirements (coordinate with In-Situ & Data Ethics SG and initiatives like NextGEOSS and e-shape).
 - Identify GEO platform-brokered data providers compared to GEO WP Activities and understand why there are gaps. Develop a strategy to address gaps.
 - Monitor trends with respect to FAIR, TRUST and CARE Principles, taking into account previously collected information about data principles by the global polar community and other parties.
 - Extract and describe best practices.
- B. **Determine how the uptake of these principles may be furthered [July -October 2021]**
 - Identify benefits, barriers, and implications of implementing the DSPs and DMPs, examples of lessons learned by e.g. UNECE (contact B.L.Bye).
 - Provide training on the implementation of the DSPs and DMPs.
 - Leverage activities on Interoperability and Data Quality, e.g. CEOS, ESIP Information Quality Cluster. Connect with NextGEOSS.
 - Continue to promote the adoption and implementation of the DSPs and DMPs globally.
- C. **Address changes in the context of Open Science [August-November 2021, review of GEO Open Science still ongoing]**
 - Review existing Documents, DSP and DMP, DSDMP SG survey, white papers, etc. done so far.
 - Interlink FAIR, TRUST and CARE Principles, foster synergies with the SG 'Data Ethics,' and 'In-situ Data' Subgroups. One task is the promotion of GEOSS DSP & DMP documents, which includes educating and communicating the differences and common aspects of the multiple DM-mechanism and DSPs.
 - Trigger the availability and visibility of new principles as well as an 'evolutionary' process that identifies changes in a transparent and traceable manner.

Finally, the subgroup will apply for a GEO WG breakout session/webinar to report out about progress to reach a wider audience at GEO Week in November.

Activities in the same context are planned and welcomed by the group for the GEO Symposium in June and further conferences regarding data and data management.

The subgroup will coordinate efforts, regarding common needs, assessment and effective information gathering with the SGs 'In-Situ' & 'Data Ethics' in the GEO-Data WG and the GEOSS Platform Operations Team for two main reasons: to build on what they have done in the past and to ensure that the groups ask the GEO Flagships and GEO Initiatives.

Working ARRANGEMENTS

Recent work is conducted mainly through monthly conference calls and emails. The activities, especially the analytic tasks of reviewing documents and projects, setting up surveys and interviewing project managers about guidelines, should be organized in small working teams that have the appropriate knowledge and experience. GEO Week in November 2021 will be the platform where the subgroup plans to present their accomplishments.