

Data Licensing Guidance

This document is submitted by the Data Working Group to the Programme Board for decision to approve the recommended set of data licenses.

1 INTRODUCTION

The Programme Board directed the Data Working Group (DWG) to prepare guidelines regarding open data licensing (Action PB-24.05). This document responds to that action, providing data licensing guidance for GEO members and Participating Organizations and GEO Work Programme Activities, consistent with the GEO Data Sharing Principles and other existing GEO policy. This living document was developed by the Law and Policy Subgroup (LP-SG) and approved by the Data Working Group.¹

2 BACKGROUND

Data users need to understand their legal rights and obligations when using data. The Earth observation (EO) community has often used phrases such as “full and open” to convey this information. With expanded use of EO data, however, this phrase no longer provides sufficient legal certainty. This uncertainty discourages the use of EO data.

Additionally, some GEO members and the private EO community use custom, lengthy “End User License Agreements” (EULAs) to describe allowable use. Accepting EULAs requires legal review, and EULAs often include substantive restrictions on use (such as restricting to non-commercial use).

Frequently these custom EULAs include terms that national governments are unwilling to accept (such as being subject to foreign law, and indemnification requirements), requiring lengthy negotiation of those terms. Small and medium-size enterprises are at a further disadvantage, lacking the clout to request that data providers negotiate EULA terms and requiring investment in legal counsel to understand the implications of accepting those terms. Furthermore, the lack of uniformity in definitions, treatment of value-added products, and other important terms causes uncertainty, and could create legal risks for users.

This issue has been well known and explored for at least a decade, both within GEO and in other international groups. In 2011, for example, the GEO Legal Interoperability Sub-Group of the Data Sharing Task Force first developed a White Paper for the GEO-VIII Plenary that recommended that “GEO Members and Participating Organizations should consider adopting one of the following

¹ The primary authors of this document were Derek Hanson and Jordi Sandalinas. The Law and Policy Subgroup (LP-SG) would like to express its gratitude to its members for their thoughtful review and comments: Suchith Anand, Mariel Borowitz, Gilberto Camara, Robert Chen, Estelle Chou, Paola De Salvo, Robert Downs, Joanne Gabrynowicz, Chuang Liu, Thomas McNerney, Lea Shanley, and Fraser Taylor. The views expressed here are those of the authors and not necessarily those of their employing institutions.

existing private-law waivers or standard common-use licenses,” listing five options from Creative Commons and Open Data Commons. However, wide adoption of these recommendations stalled.

With the recent push to combine open datasets to leverage artificial intelligence, machine learning, and other cloud storage and computing techniques, however, attempting to combine datasets that are subject to different license terms has only further compounded these legal issues (sometimes referred to as “legal interoperability”). Put simply, the legal treatment of data has not kept up with the rapid advancement of data processing techniques and interoperability standards.

In response, the GEO community and other groups have renewed calls for the use of standard open data licenses. Within the past year, the GEO Statement on Open Knowledge and the Revised GEO Data Sharing and Data Management Principles have specifically called for the use of open data licenses. Just a few of the groups or principles outside of GEO that have called for the use of open data licenses include:

- The FAIR Principles and other Open Science initiatives (including UNESCO’s)
- The Research Data Alliance and CODATA
- International Hydrographic Organisation
- United Nations Statistical Commission
- European Commission

To note, there has also been increasing focus in the broader data community (beyond EO data) on individual data privacy, data ethics, indigenous data rights (CARE Principles for Indigenous Data Governance), and other concerns.

Recognizing indigenous interests in datasets can occur through inclusion of indigenous metadata alongside open data licenses. Disclosure of indigenous interests may occur through acknowledgement, attribution, authorship, and/or tools like the Traditional Knowledge/Biocultural (TK/BC) Notices & Labels that recognize cultural authority and can sit alongside rights statements and open licenses.

These are important issues for the GEO community, but this guidance document is not intended to address these issues. Instead, this guidance is designed for use by data providers when sharing EO data that they have determined to be appropriate for sharing openly and without restrictions.

3 PRIOR GEO ANALYSIS

GEO has considered this issue for over a decade. Following publication of the 2011 White Paper described earlier, in 2014, the Legal Interoperability Sub-Group of the GEO Data Sharing Working Group presented its “Legal Mechanisms to Share Data as Part of GEOSS Data-CORE” to GEO-XI Plenary. This comprehensive analysis was the result of years of work and identified and addressed all of the issues described above. It recommended “the use of only standard instruments to help assure legal interoperability of data.”

The Law and Policy Subgroup of the GEO Data Working Group reviewed this 2014 analysis and confirmed its continued validity. Therefore, rather than reproduce this report, the Law and Policy Subgroup decided to summarize its recommendations and focus on barriers to implementation.

This guidance document is the first work product of the Law and Policy Subgroup, designed to summarize the recommendations of the 2014 report and to provide general guidance on all data shared within GEO. Furthermore, it is designed to be used in specific existing GEO efforts, including:

- To inform an existing license drop-down menu for submissions of data to the GEO Knowledge Hub;
- As part of guidance for implementing the GEO Open Knowledge Statement; and
- As part of follow-on guidance to the GEO Data Management Principles Implementation Guidelines.

4 DATA LICENSING GUIDANCE

The following data licenses² are consistent with the GEO Data Sharing Principles:

- Creative Commons Zero 1.0 Universal Public Domain Dedication (CC0) (<https://creativecommons.org/publicdomain/zero/1.0/>)
- Open Data Commons Public Domain Dedication and License (PDDL) v1.0 (<https://opendatacommons.org/licenses/pddl/1-0/>)
- Creative Commons Attribution 4.0 International (CC BY 4.0) (<https://creativecommons.org/licenses/by/4.0/>)

GEO Members, Participating Organizations, and other entities that share open, unrestricted data should clearly license such data using only one of these licenses. Custom license agreements should not be used, and these standard licenses should not be modified or augmented with additional text.

Additional summary information regarding these three data licenses:³

- Creative Commons Zero 1.0 Universal Public Domain Dedication (CC0 1.0)
 - Summary Description: Waives copyright and related rights in the data, to the extent permitted by law. Permits users to use, copy, modify, and redistribute the data for any purpose.
 - Copyright Retained? No.

² While some of the legal instruments listed can be characterized as public domain dedications or waivers of rights rather than a license, this guidance document refers to all such instruments as “licenses.”

³ Nothing in this guidance should be construed as legal advice. Data providers and data users should consult with their own legal counsel if they have additional questions or concerns about these licenses.

- Attribution Legally Required? No.
 - Internationally Valid? Yes.
 - Machine Readable? Yes.
 - Additional Information: <https://creativecommons.org/publicdomain/zero/1.0/>
- Open Data Commons Public Domain Dedication and License v1.0 (PDDL)
 - Summary Description: Waives copyright and related rights in the data, to the extent permitted by law. If waiver is not permitted by law, licenses the use of the data. Permits users to use, copy, modify, and redistribute the data for any purpose.
 - Copyright Retained? No.
 - Attribution Legally Required? No.
 - Internationally Valid? Yes.
 - Machine Readable? Yes.
 - Additional Information: <https://opendatacommons.org/licenses/pddl/summary/>
- Creative Commons Attribution 4.0 International (CC BY 4.0)
 - Summary Description: Retains copyright in the data and provides a license that permits the user to use, copy, modify, and redistribute the data for any purpose, provided that the user provides credit to the original data provider.
 - Copyright Retained? Yes.
 - Attribution Legally Required? Yes.
 - Internationally Valid? Yes.
 - Machine Readable? Yes.
 - Additional Information: <https://creativecommons.org/licenses/by/4.0/>

5 REFERENCE DOCUMENTS

GEO Data Sharing Principles

[D]ata, metadata and products will be shared as Open Data by default, by making them available as part of the GEOSS Data Collection of Open Resources for Everyone (Data-CORE) *without charge or restrictions on reuse*, subject to the conditions of registration and attribution when the data are reused;

GEO Statement on Open Knowledge

Open Data: The data needed to reproduce scientific results or support public decision making, including data stemming from publicly funded endeavors, *should be released publicly under an open license* and follow the GEO Data Sharing and Management Principles, the FAIR Principles (Findable, Accessible, Interoperable, and Reusable) using human- and machine-readable data formats, the TRUST Principles (Transparency, Responsibility, User focus, Sustainability, and Technology), using trustworthy repositories, and the CARE Principles (Collective benefit, Authority to control, Responsibility, and Ethics). At the same time, the GEO Data Sharing Principles recognize there are legitimate reasons to manage data access in accordance with applicable international instruments, national policies and legislation, e.g., privacy, national security, and law enforcement.

Revised GEO Data Sharing and Data Management Principles

All data should specify a license, including the data that conforms to open data licenses.

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