

Open Data Licensing in the GEO Context

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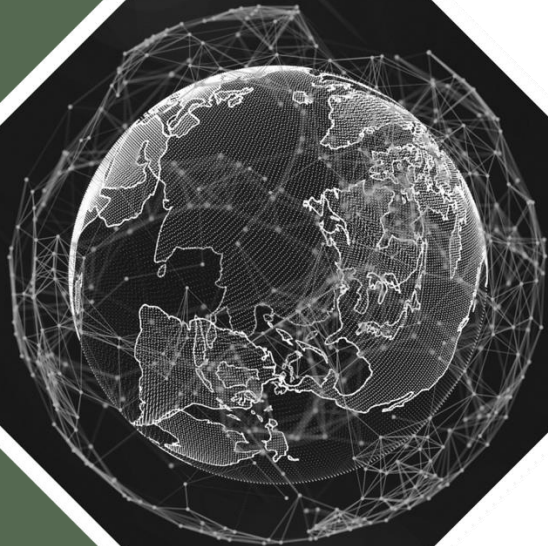
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*Former co-chair, CODATA-RDA Interest Group on Legal Interoperability
of Research Data*















First GEOSS 10-Year Implementation Plan, 2005

**The GEOSS 10-Year Implementation Plan,
ENDORSED by all GEO Members, stated:**

*The societal benefits of Earth
observations cannot be achieved without
data sharing*

Original GEOSS Data Sharing Principles:

- There will be **full and open exchange** of data, metadata and products shared within GEOSS, recognizing relevant international instruments and national policies and legislation.
- All shared data, metadata and products will be made available with **minimum time delay** and at **minimum cost**.
- All shared data, metadata and products being **free of charge** or **no more than cost of reproduction** will be encouraged for research and education.

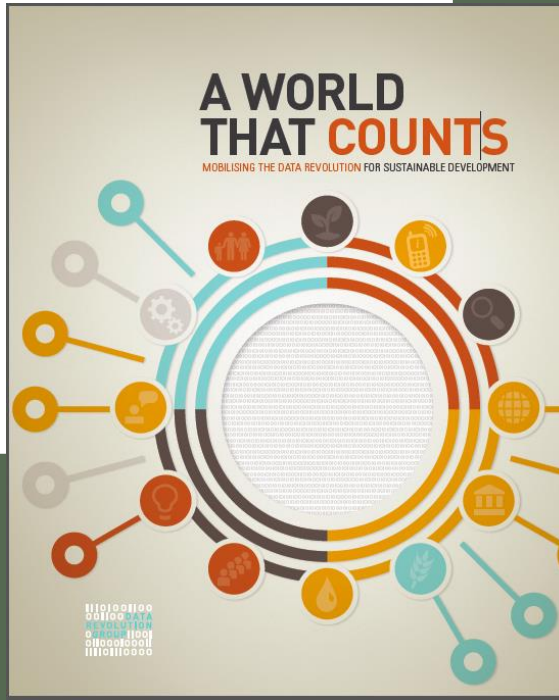
DMP label			
	Discoverable	1	D
	Accessible	2	A
	Standard encoding using	3	Usability
	Well documented metadata	4	
	Traceable	5	
	Quality documented	6	
	Preserved	7	Preservation
	Periodically verified	8	
	Reviewed and refreshed	9	Curation
	Tagged with permanent ID	10	

Early GEO Data Sharing & Management Activities

- Developed Implementation Guidelines for the DSPs
- Introduced concept of the **GEOSS Data CORE** (Data Collection of Open Resources for Everyone)
- Addressed **legal interoperability** issues, recommending use of the public domain or open-access data licenses
- Developed comprehensive set of **Data Management Principles**, adopted at GEO-XI Plenary in Gabon in 2014
- Analyzed the value of open data

Recommendations Accepted at the GEO-VIII Plenary, 2011

- **Legal interoperability** for data means that the legal rights, terms, and conditions of databases from two or more sources are compatible and the data may be combined by any user without compromising the legal rights of any of the data sources used.
- If the database is not in the public domain as a result of a statutory or private-law waiver of rights, or by the expiration of the term of protection of any rights, GEO should adopt a **common-use data license**.
- Based on these characteristics, GEO Members and Participating Organizations should (voluntarily) consider adopting one of the following **existing private-law waivers or standard common-use licenses**:
 - Creative Commons Public Domain Mark
 - Creative Commons Public Domain Dedication (CC0)
 - Open Data Commons Public Domain Dedication & License
 - Creative Commons Attribution License (CC BY 3.0)
 - Open Data Commons Attribution License (ODC BY 1.0)



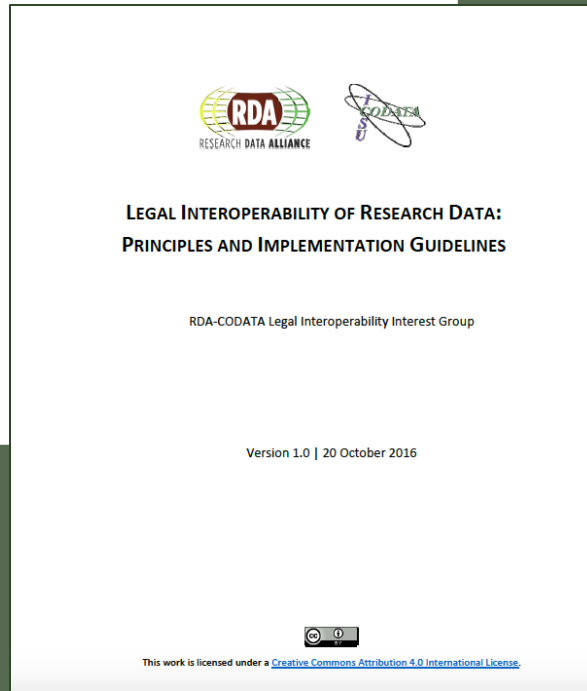
UN Independent Expert Advisory Group on the Data Revolution for Sustainable Development (2014)

<https://www.undatarevolution.org/report/>

- *A World That Counts* identified 9 key principles, including:

Data transparency and openness

“All data on public matters and/or funded by public funds, including those data produced by the private sector, should be made public and “**open by default**”, with narrow exemptions for genuine security or privacy concerns. It needs to be both technically open (i.e., available in a machine-readable standard format so that it can be retrieved and meaningfully processed by a computer application) and **legally open** (i.e., **explicitly licensed in a way that permits commercial and non-commercial use and re-use without restrictions**).”



RDA/CODATA Interest Group on Legal Interoperability of Research Data (2016)

■ Principles on the Legal Interoperability of Research Data

1. Facilitate the **lawful access to and reuse** of research data.
2. Determine the **rights** to and **responsibilities** for the data.
3. **Balance** the legal interests.
4. State the rights **transparently** and **clearly**.
5. Promote the **harmonization** of rights in research data.
6. Provide proper **attribution** and **credit** for research data.





GEO Strategic Plan 2016-2025

The *GEO Strategic Plan 2016-2025:* *Implementing GEOSS states:*

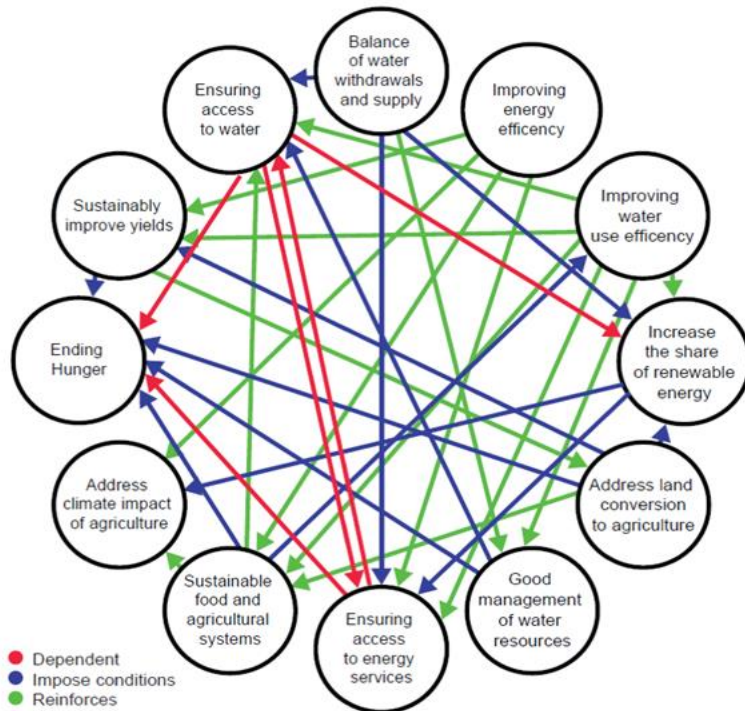
GEO recognizes that the societal benefits arising from Earth Observations can only be fully achieved through the sharing of data, information, knowledge, products and services.

New Data Sharing Principles were adopted in 2015 at the GEO-XII Mexico City Plenary and Ministerial



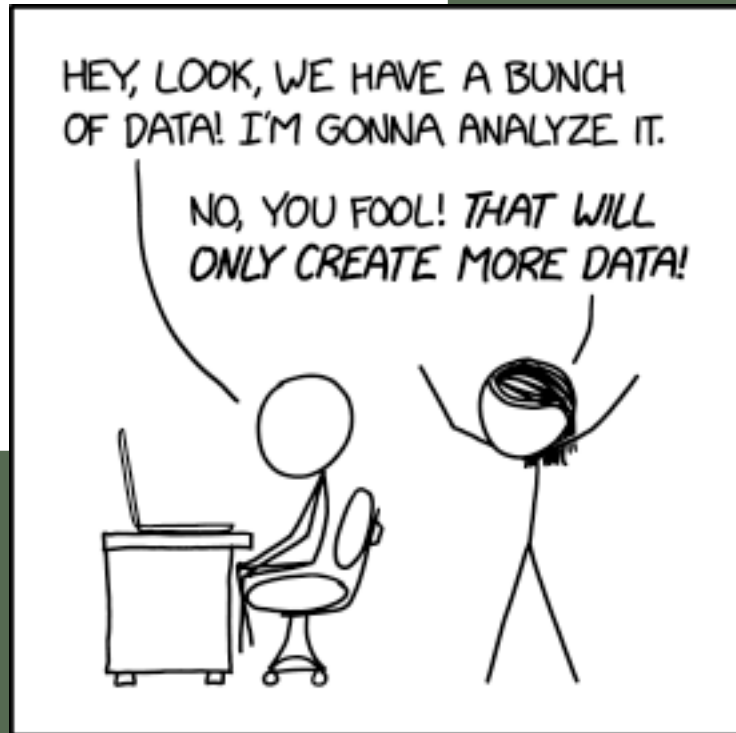
GEOSS Data Sharing Principles (2016-2025)

- Data, 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;
- Where international instruments, national policies or legislation preclude the sharing of data as Open Data, data should be made available with **minimal restrictions** on use and at **no more than the cost of reproduction and distribution**; and
- All shared data, products and metadata will be made available with **minimum time delay**.



Why Do We Need Open Data Sharing?

- Pressing need for **rapid scientific progress**, e.g., related to climate change, sustainable development, hazards, humanitarian response
- Shared data and information facilitate **trust and cooperation**, supporting a common understanding of challenges, promoting collaborative solutions, avoiding conflict
- Greater **efficiency** and **expanded capabilities**, e.g., through reduced duplication, more effective investment in systems & data, and better coordination across observations
- More rapid **adoption and scaling up** of solutions based on open data and information
- **Equity** and **leaving no one behind**, e.g., through wider access to and use of data by all stakeholders



How Does Open Data Licensing Help?

- Provides **greater clarity** to both data providers and users on **data rights and responsibilities** associated with data access and use.
- Reduces **transaction costs** of using and integrating data by facilitating machine-to-machine interactions and case-specific legal analysis.
- Reduces **potential liabilities** associated with both data provision and use.
- Facilitates clarification of **data provenance** and helps address **cross-jurisdictional issues** for data produced in different parts of the world or for different purposes.
- Helps those with fewer legal resources to **assert ownership** and **receive recognition** for their contribution

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