



GEOSS Data Sharing Principles: current and proposed

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GEOSS Data Sharing <u>Principles</u>

The GEOSS 10-Year Implementation Plan states that: "*The societal benefits of Earth observations cannot be achieved without data sharing*" and sets out the **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.





GEOSS has Data Sharing <u>Principles</u>, (different from a Data Sharing <u>Policy</u>)

The GEOSS Data Sharing Implementation Guidelines confirm:

"GEO welcomes all data contributions into the GEOSS. When registering data in GEOSS, the contributor should present any restrictions arising from relevant international instruments and national policies and legislation, and the duration of each restriction, that is applicable to the exchange of the data, metadata, and products submitted".





GEOSS Data Sharing Implementation Guidelines

(Accepted by the GEO-VI Plenary, Washington D.C., Nov. 2009)

- Promote <u>full and open exchange</u> of data according to GEOSS Data Sharing Principles (DSP)
- Enable GEOSS users to <u>reuse and re-disseminate</u> shared data, metadata and products
- Ensure <u>consistency</u> with relevant international instruments and national policies and legislation
- Encourage pricing policies consistent with GEOSS DSP.
- Advocate minimum time delays for delivering data through GEOSS
- <u>Promote research & education</u> uses of GEOSS data, metadata and products.





GEOSS Data Sharing <u>Action Plan</u>

(Accepted by the GEO-VII Plenary, Beijing, 2010)

- Notes that the achievement of full and open exchange of, and access to, key datasets requires actions by:
 - ✓ GEO collectively
 - ✓ Members and Participating Organizations individually
 - \checkmark GEOSS tasks and cross-cutting activities
- Create the **GEOSS Data-CORE** concept: GEOSS Data Collection of Open Resources for Everyone





The GEOSS Data-CORE "tag"

- GEOSS Data-CORE: the GEOSS Data Collection of Open Resources for Everyone is a distributed pool of documented datasets with full, open and unrestricted access at no more than the cost of reproduction and distribution.
 - Data-CORE is a subset of all data registered in the GEOSS
- Four GEOSS Data-CORE tags for use by the data providers:
 - 1. geossDataCore (identifies the data as GEOSS DataCORE)
 - 2. geossNoMonetaryCharge
 - 3. geossUserRegistration
 - 4. geossAttribution

- (data available at no cost at all) (user registration required) (data citation required)
- Guideline document prepared by the DSWG:
 "Instructions for GEOSS Data Providers: How to place tags in the
 Metadata for GEOSS Data-CORE"

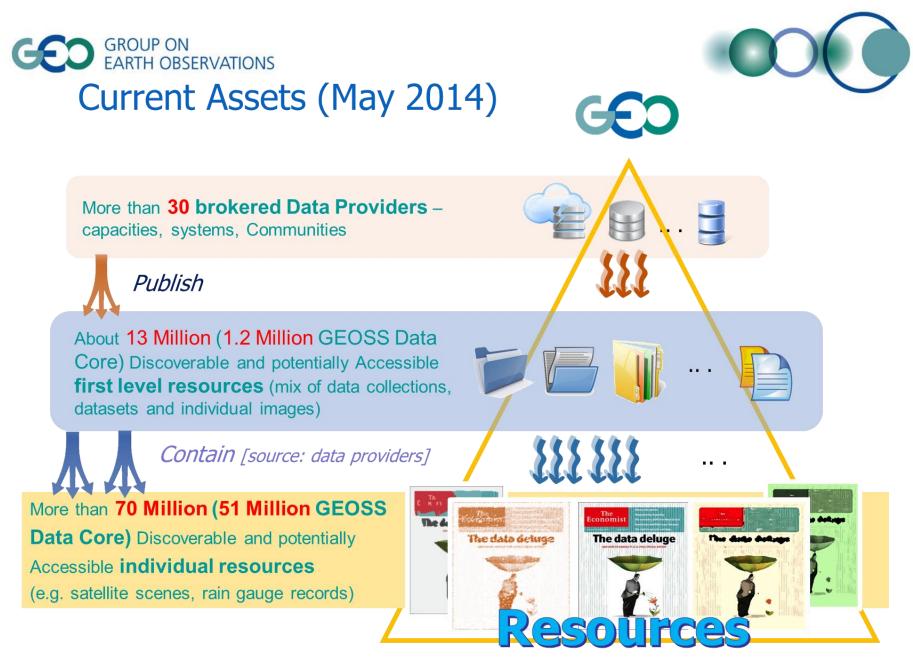


The GEOSS Data-CORE "tag" (cont.)

- Since October 2012, GEO Members and Participating Organisations that had pledged resources to the GEOSS Data-CORE have been contacted to make their open resources visible and available as such.
- GEOSS Data-CORE resources are identified on the GEOSS Web Portal (http://www.geoportal.org/) thanks to the GEOSS Data-CORE icon:



A ranking mechanism allows GEOSS Data-CORE datasets to appear at the top of the list of results returned after a query.



(Source: CNR: Stefano Nativi)





The <u>GEOSS Data-CORE</u> state-of-play

- The GEOSS data CORE concept has the potential to be one of the key success stories of GEOSS, distinguishing it from any other web-based infrastructure.
- Further effort is needed to increase awareness/use of the GEOSS Data-CORE
 - Too many members of the GEOSS community of users are not yet aware of / not yet using available GEOSS Data-CORE datasets;
 - Some thematic areas still poorly represented amongst the GEOSS Data-CORE;
 - Spatial extent and temporal resolution of available GEOSS Data-Core datasets often do not fit users' needs;
 - Need to collect usage metrics for GEOSS Data-CORE





1. Proposal for "GEOSS Data Sharing Principles Post-2015"

For consultation

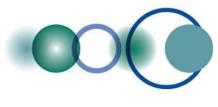




Rationale for the proposal

- The need for a proposal is based on the following findings:
 - Considerable expansion of the Open Data trend worldwide since the adoption of the GEOSS Data Sharing Principles in 2005;
 - Stronger awareness of the benefits and increased commitment towards full and open Earth observation data sharing without restrictions on re-use;
 - Current GEOSS Data Sharing Principles do not take advantage of the GEOSS Data-CORE mechanism (established as part of the GEOSS Data Sharing Action Plan adopted in Beijing)
 - The renewed GEO (2016-2025) brings an opportunity to further strengthen GEO's role in promoting data availability on a full and open basis.





Wording recommended by the DSWG

- "Data, metadata and products will be shared through GEOSS as Open Data by default, by making them available as part of the GEOSS Data-CORE without charge, without restrictions on reuse, subject to the conditions of registration and attribution when the data are reused."
- 2. "Where international instruments, national policies or legislation preclude the sharing of data as Open Data they should be made available through GEOSS with minimal restrictions on use and at no more than the cost of reproduction and distribution."
- 3. "All shared data, products and metadata will be made available through GEOSS with minimum time delay."





Expected value of the proposed wording

- Elevate the status of GEOSS Data-CORE to the default standard of data sharing through GEOSS;
- Refer to 'Open Data' to align the GEOSS Data Sharing Principles with latest international, regional, national developments and to provide re-use context for data shared as part of the GEOSS Data-CORE;
- Keep considering a sharing option that allows imposition of restrictions, but as a deviation from the default mechanism;
- Broaden the concept of 'free of charge data provision' beyond "research and education purposes" (as laid down in the current GEOSS Data Sharing Principles)





2. Draft White Paper on "Legal Mechanisms to Share Data as Part of GEOSS Data Core"

For consultation

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About legal interoperability

- Legal interoperability among multiple datasets from different sources occurs when:
 - Use conditions are clearly and readily determinable for each of the datasets;
 - The legal use conditions imposed on each dataset allow creation and use of combined or derivative products;
 - Users may legally access and use each dataset without seeking authorization from data creators on a case-by-case basis (assuming that the accumulated conditions of use for each and all of the datasets are met).





DSWG recommendations

- The best approach to advance the goal of promoting access to Earth observation datasets as part of the GEOSS Data-CORE data consists in a legislative waiver of rights and the placing of data and information produced by government entities in the public domain
- Until relevant legislative measures are adopted and enforced, waivers and common-use licenses can be adopted on a voluntary basis for the data, metadata and products controlled by the GEO Members and Participating Organisations





DSWG recommendations on Standard licences/waivers for use by the GEO community

- Creative Commons Public Domain Mark (PDM);
- Statutory waiver of copyright;
- Creative Commons Public Domain Waiver (CC0);
- Open Data Commons Public Domain Dedication and License (PDDL);
- Creative Commons Attribution License (CC BY 4.0)

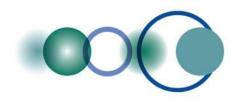




DSWG recommendations on Custom licences and waivers

- They must be compatible with the GEOSS Data-CORE:
 - Free of restrictions on re-use;
 - With permitted user registration, attribution conditions and marginal cost recovery.
- They should be:
 - Valid under the laws of as many different jurisdictions as possible;
 - Clear and understandable to the data provider or user;
 - Easy to find and recognize;
 - Embeddable in the data as machine readable metadata;
 - Available in different languages;
 - Kept under the legal control of the data providers (not of GEO)





Thank you for your attention!

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