



Exchanging and Sharing Geodetic Data

- A Policy Perspective -

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Generally -

- A **government policy** is a statement or an announcement of a government's activities, plans, intentions, and guiding principles relating to issues / challenges of the day.
- It also declares how a government agency implements legislation, changes law, instigates a public or community initiative or makes decisions.
- **Policy making** is the process of transforming an idea into an action.



Some questions to be considered during a S.W.O.T analysis –

- Why do you want to share geodetic data?
- What is your government's position or opinion on geodetic data sharing?
- What geodetic data can be shared?
- Who is the owner and / or data custodian of the geodetic data?
- Who should be involved – internally and externally, traditional and non-traditional?



Geodetic Data Sharing Policy – Yes or No ?



Some questions to be considered during a S.W.O.T analysis –

- Do you have the capacity to share geodetic data?
- Are there impediments or restrictions or challenges (real or perceived) associated with sharing geodetic data? – technical, political, legal, social, economic?
- What is the status of your geodetic data “closed” or “opened” or “shared”?



Geodetic Data – Opened / Closed / Shared?

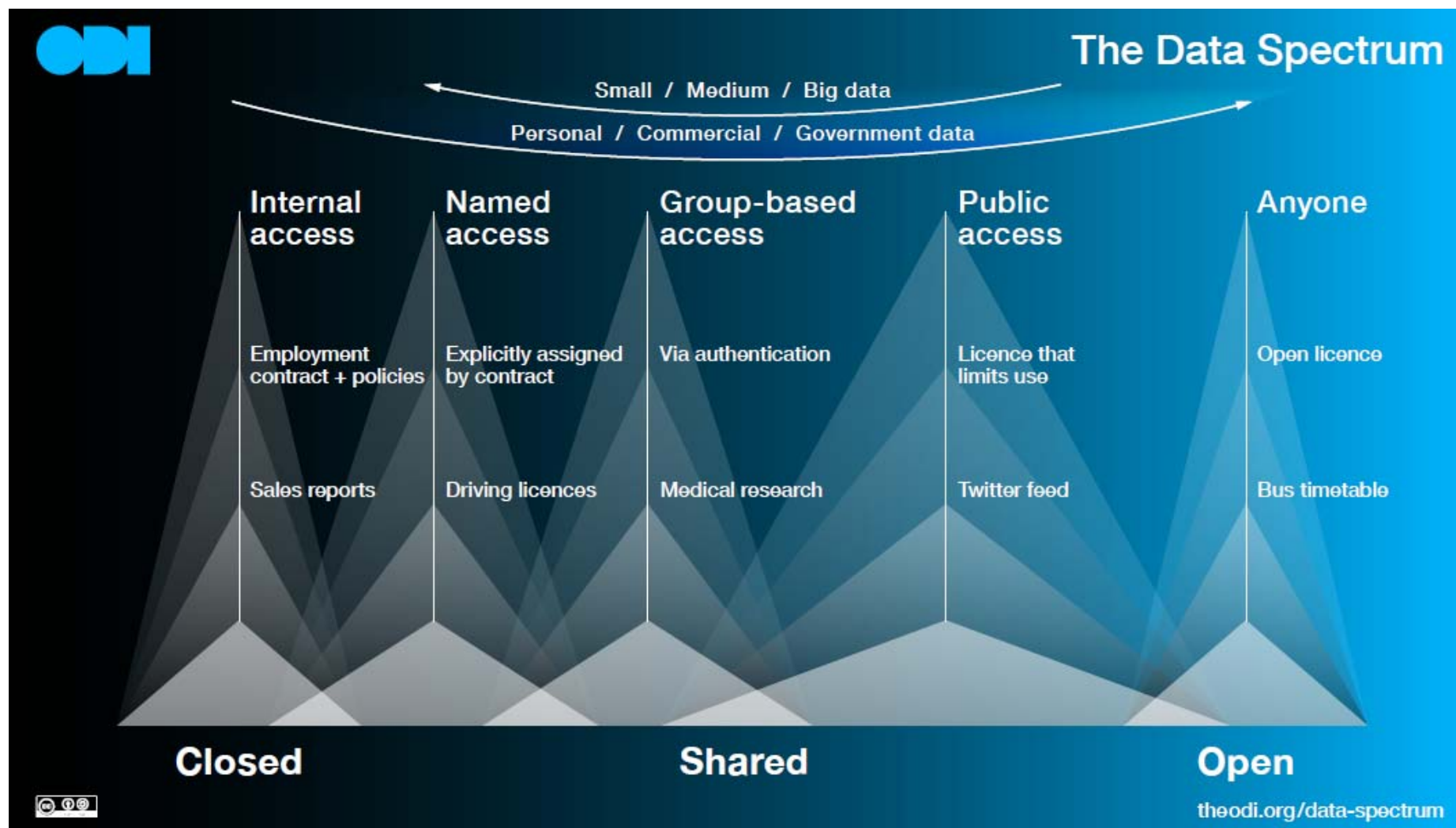


- **Open Data** – data that can be accessed, used, and shared by anyone without restrictions.
 - Weather records, earthquake monitoring data, and particle physics information has been opened up for research to develop solutions or assist risk management
- **Closed data** - data that only people in an organisation can see.
 - National security data, mobile phone use, confidential business reports
- **Shared data** (a hybrid of both) – data that can be use by a specific group of people for a specific purpose; broad term that is often used to cover data that is collected everyday.
 - Supermarket shopping habits, electoral register
- The difference between these is about **who can use data and how!**



<https://theodi.org.au/>

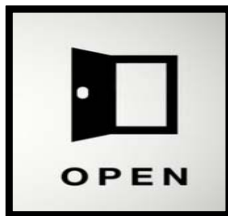
Geodetic Data – Opened / Closed / Shared?



Geodetic Data – Opened / Closed / Shared?



What classification is - ***geodetic data*** ?



Is it closed? If so, why?

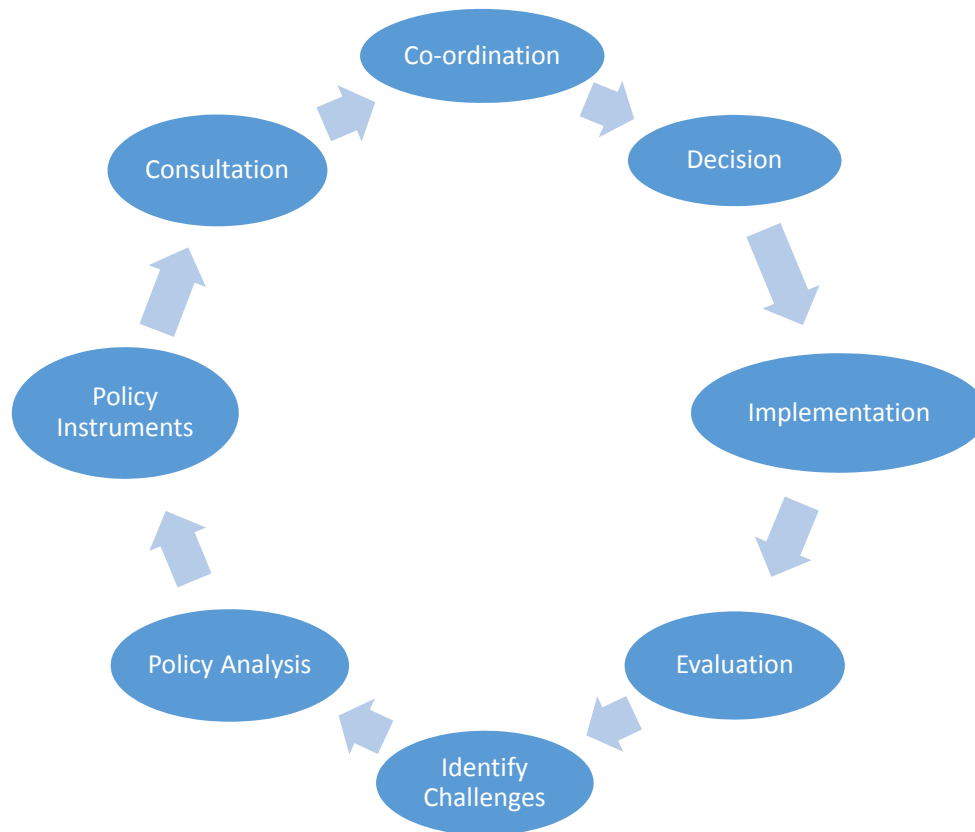
Can it be open? If so, is it being implemented?

Can it be shared with expressed permissions on how it shall be accessed, used, re-distributed and published?

Generic Public Policy Cycle



- Creating a geodetic data exchange or sharing policy is a decision for governments and respective agencies.
- There is a global trend amongst geospatial organisations, agencies and authorities to embrace, create or consider “shared or open” data policies.



Policy Cycle

1. Challenge (issue) identification
2. Policy analysis
3. Consultation (which permeates the entire process)
4. Policy instrument development
5. Building coordination and coalitions
6. Program Design: Decision making
7. Policy Implementation
8. Policy Evaluation

The Australian Policy Handbook –Bridgman / Davis



Why do you need a geodetic data sharing policy? Why is it important?

- State the benefits, purpose, vision, and drivers for the policy
- Applicable or relevant reasons -
 - Meeting / accommodating community needs, obligations and expectations (local / regional / global); other - social, economic, technical, environmental, scientific?
 - Fosters transparency, accountability, a more efficient, effective and responsive government
 - Stimulates research outcomes, and innovation
 - Improves management of datasets, assets, service delivery
 - Supports initiatives with respect disaster risk management / mitigation / monitoring
 - Creates economic opportunities
 - Enhances development of fundamental data for SMART cities
 - Facilitates capacity development
 - Delivery of Sustainable Development Goals (<https://theodi.org/supporting-sustainable-development-with-open-data>)
 - Empowers governments, society, public and private sector organizations to work toward better outcomes
- CASE STUDIES and STORIES - <https://theodi.org/publications>



What are the guiding principles of the policy?

- The core values, ideologies, standards, associated with geodetic data sharing.

The International Open Data Charter Principles -



<https://opendatacharter.net/principles/>



What are the guiding principles of the policy?

“GEO now aims to implement the following GEOSS Data Sharing Principles:

- 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.**”



What are the guiding principles of the policy?

“Principles

- Data, metadata, products, and information should be **fully and openly shared, subject to national or international jurisdictional laws and policies**, including respecting appropriate extant restrictions, and in accordance with international standards of ethical research conduct.
- Data, metadata, products, and information produced for research, education, and public-domain use will be **made available with minimum time delay and free of charge**, or for **no more than the cost of dissemination**, which may be waived for lower-income user communities to support equity in access.
- All who produce, share, and use data and metadata are stewards of those data, and **have responsibility for ensuring that the authenticity, quality, and integrity of the data are preserved**, and respect for the data source is maintained by ensuring privacy where appropriate, and encouraging appropriate citation of the dataset and original work and acknowledgement of the data repository.
- Data should be **labelled ‘sensitive’ or ‘restricted’ only with appropriate justification** and following clearly defined protocols, and should in any event be **made available for use on the least restrictive basis possible.”**



The World Data System (WDS) is an Interdisciplinary
Body of the International Council for Science (ICSU)

<https://www.icsu-wds.org/services/data-sharing-principles>



What are the guiding principles of the policy?

Principle 1 - Government data will be made available **unless access is restricted for reasons of privacy, public safety, security and law enforcement, public health, and compliance with the law.**

Principle 2 - Government data will be made **available under flexible licences.**

Principle 3 - With limited exceptions, government data **will be made available at no or minimal cost.**

Principle 4 - Government data will be **easy to find (discoverable) and accessible in formats that promote its reuse.**

Principle 5 - Government will **follow standards and guidelines** relating to release of data and agency accountability for that release.

An agency may commercialise, or apply the Cost Recovery Guidelines to, government data if:

- a) it has an explicit statutory function to do so; or
- b) it has been explicitly authorised to do so by the relevant Minister after consulting with the Treasurer, because of a clear net benefit to the Victorian community.



What are the guiding principles of the policy?

Open Data Principles

Open data principles lead to more responsive and smarter government, and better service delivery. To meet the obligations of this policy, agencies must manage data as a strategic asset to be:

- Open by default, protected where required
- Prioritised, discoverable and usable
- Primary and timely
- Well managed, trusted and authoritative
- Free where appropriate
- Subject to public input.

<https://www.finance.nsw.gov.au/ict/resources/nsw-government-open-data-policy>



1 Principles

The Queensland Government recognises the importance of effectively managing the release of government data to optimise the use and reuse of open data for the benefit of the Queensland people. The Queensland Government commits to following the International Open Data Charter¹ principles:

1. Open by Default
2. Timely and Comprehensive
3. Accessible and Usable
4. Comparable and Interoperable
5. For Improved Governance and Citizen Engagement
6. For Inclusive Development and Innovation

<https://www.qld.gov.au/data/qld-data-policy-statement.pdf>



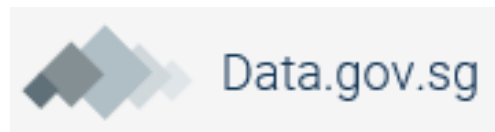


What are the guiding principles of the policy?

Data Sharing Principles

The following data sharing principles aim to guide the Government agencies' Open Data efforts.

- *Data shall be made easily accessible*
- *Data shall be made available for co-creation*
- *Data shall be released in a timely manner*
- *Data shall be shared in machine-readable format*
- *Data shall be as raw as possible*



<https://data.gov.sg/about>



data.gov.bd
সকলের জন্যে তথ্য

<http://data.gov.bd/dataset>



Article 1. Principles

We subscribe to emerging international principles and best practices on open data, such as those that prescribe that data should be:

1. Open by default;
2. Timely and comprehensive;
3. Accessible and usable;
4. Comparable and interoperable;
5. For improved governance and citizen engagement; and
6. For inclusive development and innovation;⁵



https://eiti.org/sites/default/files/documents/ph-eiti_open_data_policy_12.2016.pdf



For whom will this policy apply to, and what geodetic data is be shared?

- Prepare a scoping statement that expresses what this policy will do and what it applies to.
- State what geodetic data the policy refers to?
 - GNSS, gravity, height, tidal, other ?
- List the stakeholders, parties and agencies that are involved, - who will be affected, who will be responsible, who can collaborate, who will you engage?
 - Local, regional global, scientific, academic, commercial, professional, industry sectors, statutory



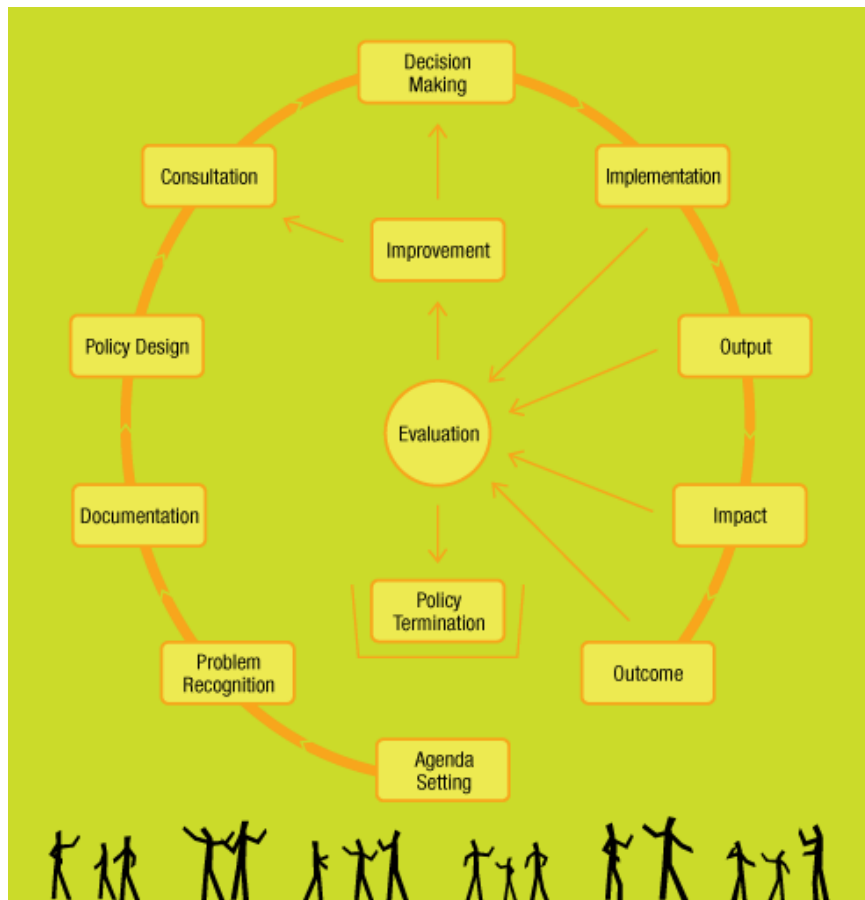
How will the policy be administered?

- Describe the frameworks for – governance, geodetic information management
- Refer to related legislation / other policies / strategies / initiatives / standards
 - Copyright / Intellectual Property
 - Privacy / Freedom of information
 - Records and information management
 - Technical standards and acceptable practices (...**metadata!**...)

Noting all of the above could be local/ regional / international

- Licence or Data Sharing agreements – expressing limitations with respect to use, access, sharing, publishing? alternatively is it “open”?





How will the policy be implemented?

- Outline the process for the various phases of implementation and include timelines – both short and long term activities?
 - Consultation
 - Data discovery
 - Policy development
 - Institutional matters
 - Standards / guidelines development
 - Implementation
 - Policy evaluation and review
- Describe the role and functions of each stakeholder or agency involved with the data sharing policy; and how each can be involved.

Other relevant sections / appendices

- Definitions and terms used in the policy document
 - <https://opendatacharter.net/resource/definition-key-terms-charter-principles/>
- More detailed explanation of the “principles”
- Specifications of the geodetic data to be shared – quality / formats / standards / metadata
- Examples of an “open data” or “data sharing” agreement / licence
- References to geodetic data sharing “toolkits”, guidelines
- Frequently asked questions
- Who to contact



<https://data.wa.gov.au/open-data-policy>



How do we implement change and a strategy re geodetic data sharing?

Options -

- **Articulate your vision, with clear examples of benefits the geodetic data sharing will bring.**

Is there a challenge that sharing geodetic data can resolve? What are the benefits of sharing – tangible / specific / universal / non geospatial. What value will geodetic data sharing bring to the community?

- **Secure support for the geodetic data sharing initiative from both senior / political leadership and government officials within your agency before declaration.**

Create a campaign / initiatives to advocate / educate government officials about geodetic data sharing. Fostering support for the change will help encourage early uptake and on-going ownership.



How do we implement change and a strategy re geodetic data sharing?

Options -

- **Find and support “champions” of geodetic data sharing at all levels within government.**

This is essential for the sustainability and implementation of geodetic data sharing.

- **Create an accessible / simple consultative mechanism to deliver information and receive feedback about geodetic data sharing.**

Use whatever means and opportunities that are available to engage stakeholders / participants

- **Need to have “quick wins” for your geodetic data sharing initiative to assist the momentum for change.**

Release a certain number of datasets for data sharing; set up data sharing processes for internal agencies.





How do we implement change and a strategy re geodetic data sharing?

Options -

- **Be agile, flexible and responsive to the strengths and needs of different agencies and work units.**

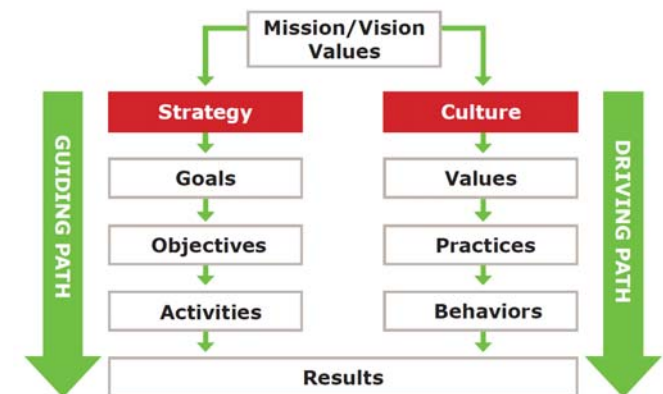
Have clear data sharing transitioning objectives and practices. Ensure geodetic data sharing principles are aligned with internal data policies and future reforms.

- **Consolidate your change management efforts**

Support staff to be educators and innovators so as build on “quick wins” and identify gaps your strategy

- **Ensure the all members of geodetic data sharing team have open / frank / regular communication.**

All parts (and people) of the geodetic data sharing are important to the sustainability of the initiative.





How do we implement change and a strategy re geodetic data sharing?

Options -

- **Locate stories that reflect the value of geodetic data sharing.**
Need to be tailored or aligned, depending on who the audience.
- **Gather and encourage on going support and demand for geodetic data sharing from external sources - traditional and non-traditional sectors.**
Note external support can help to maintain political will to support geodetic data sharing, and be a source of ongoing learning and dialogue.
- **Have learning programs to create opportunities for other government employees to be part of geodetic data sharing.**
Training sessions, secondments to teams or working groups.
- **Develop formal metrics to monitor and evaluate geodetic data sharing activities.**
To measure progress, benchmark success and identify areas for improvement.

How does your place presently rate?



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How does your place presently rate?



The Global Open Data Index (GODI) is an independent assessment and benchmarking tool of “**open government data**” publication from a civic perspective. GODI also enables different “**open data stakeholders**” to track government’s progress on “**open data**” release.

Government Budget

National statistics

Procurement

National Laws

Administrative Boundaries

Draft Legislation

Air Quality

National Maps

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Company Register

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Government Spending

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Should we request a geospatial data index?

Navigate to - <https://index.okfn.org/methodology/> for more detailed information.



Your geodetic / geospatial future is in your hands !

ありがとうございます！