International Hydrographic Organisation

Marine Spatial Data Infrastructures Working Group (MSDIWG)

Guidance for Data Licensing: A contribution from expert contributors

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1. Context

The MSDI working group was contacted by a member IHO state seeking guidance on data licensing. This paper aims to provide advice on data licencing to promote the advancement of Marine Spatial Data Infrastructures (MSDI).

2. Concepts

To avoid confusion between the authors and the readers, it is firstly important to ensure a common base of concepts and terminology.

2.1 Defining Spatial Data Infrastructure:

A Spatial Data Infrastructure (SDI) is a collection of technologies, policies and institutional arrangements that facilitate the availability of and access to spatial data¹.

A SDI facilitates the sharing of data, by removing duplication associated with the generation and maintenance of geospatial information and supports integration with other datasets. This leads to the development of innovative business applications, greater efficiencies in the public and private sector and provides better information to support decision making.

2.2 Defining Marine Spatial Data Infrastructure:

MSDI is a specialised spatial data infrastructure that encompasses all marine geographic and business information, for those working in the maritime and marine environment. Typical data includes marine boundaries, conservation and preservation areas, marine habitats, oceanography, bathymetry, hydrography, geology, marine infrastructure, wreaks, offshore installations, pipelines and cables.

2.3 Defining License:

A permission accorded by a competent authority, conferring the right to do some act which without such authorisation would be illegal, or would be a trespass or a tort².

¹ IHO: The Hydrographic and Oceanographic Dimension to Marine Spatial Data Infrastructure Development: Developing the capability

https://www.iho.int/mtg docs/com wg/MSDIWG/MSDIWG Misc/Marine SDI Documents/MSDI white pape r.pdf

² https://thelawdictionary.org/license/

Licences typically grant permissions on condition that certain terms are met. While the precise details vary, three conditions commonly found in licences are attribution, sharealike, and non-commerciality.

- An attribution requirement means that the licensor must be given due credit for the work when it is distributed, displayed, performed, or used to derive a new work.
- A share-alike requirement means that any new works derived from the licensed one must be released under the same license, and only that licence.
- The intent of a non-commercial licence is to prevent the licensee from using the work commercially.

2.4 Defining Open Data:

Open data and content can be freely used, modified, and shared by anyone for any purpose³.

The Open Definition sets out principles that define "openness" in relation to data and content including:

- Availability and Access: the data must be available as a whole, and at no more than a reasonable reproduction cost, preferably by downloading over the internet. The data must also be available in a convenient and modifiable form.
- Re-use and Redistribution: the data must be provided under terms that permit re-use and redistribution including the intermixing with other datasets.
- Universal Participation: everyone must be able to use, re-use and redistribute there should be no discrimination against fields of endeavour or against persons or groups. For example, 'non-commercial' restrictions that would prevent 'commercial' use, or restrictions of use for certain purposes (e.g. only in education), are not allowed.

3. Why data needs to be licensed

It is widely recognised that significant creative and economic potential may lie dormant in data locked up and not released on terms allowing re-use. The concepts behind MSDI recognise the potential held in data. However, if data is to be re-used by third parties it needs to be licensed.

The Hydrographic Data Policy Best Practise Guidelines for Hydrographic Offices white paper states 'fit for purpose hydrographic data and information is essential in underpinning evidence based decision making and asset management enabling governments and the commercial sector to deliver their policy objectives for the marine environment and coastal zone'. The paper points out the 'use of this data outside of navigational products has been limited, but the requirement is growing very swiftly across the world'4.

A data license provides users with legal clarity on how data can be used as well as defining user obligations. In most jurisdictions there are intellectual property rights that prevent third parties from using, reusing and redistributing data without explicit permission. Even if data is publically available, without a license a user may not have permission to access, use, or share it due to copyright laws. By applying an open license you enable users the freedom to use your data to experiment, explore and innovate.

https://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG_Misc/Marine_SDI_Documents/SDI_Hydrographic Data Policy.pdf

³ https://opendefinition.org/

4. Selecting a license

Data licenses exist on a spectrum from being completely open to being very restrictive. The type of license an organisation assigns will depend on the policies of the individual organisation.

While some governments and organisations develop there own standard licenses and custom licenses, others adopt internationally recognised licenses such as Creative Commons, or Open Data Commons.

If your organisation is new to open data you may want to first consider developing an open data policy. Other things you need to consider before selecting a license include:

- Do you want to allow commercial use?
- Do you want to allow derived works?
- Do derived works require the same license?

When assigning a license it is also important to ensure it is easy to access and easy to read.

5. Standard Licenses

The table below describes Creative Commons and Open Data Commons standard licenses, describing which licenses confirm to the Open Data Definition and other criteria relevant to selecting a license.

License	Confirm to Open Data Definition	Allows commercial use	Allows derived works	Requires same license for derived works (Share-alike)	Requires Attribution (BY)
Creative Commons CC-BY	YES	YES	YES	NO	YES
Creative Commons CC-BY-SA	YES	YES	YES	YES	YES
Creative Commons CC-BY-ND	NO	YES	NO	n/a	YES
Creative Commons CC-BY-NC	NO	NO	YES	NO	YES
Creative Commons CC-BY-NC-SA	NO	NO	YES	YES	YES
Creative Commons CC-BY-NC-ND	NO	NO	NO	n/a	YES
Creative Commons CCO	YES	YES	YES	NO	NO
Open Data Commons ODC-BY	YES	YES	YES	NO	YES
Open Data Commons ODbL-BY	YES	YES	YES	YES	YES

Open Data Commons PDDL	YES	YES	YES	NO	NO

For detailed information refer to the Creative Commons⁵ website and the Open Data Commons⁶ website.



https://creativecommons.org/https://opendatacommons.org/

References:

- 1. Creative Commons https://creativecommons.org/
- 2. DCC http://www.dcc.ac.uk/resources/how-guides/license-research-data
- 3. European Data Portal https://www.europeandataportal.eu/elearning/en/module4/#/id/co-01
- 4. IHO Hydrographic Data Policy Best Practise Guidelines for Hydrographic Offices https://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG_Misc/Marine_SDI_Documents/SDI_Hydrographic_Data_Policy.pdf
- 5. IHO The Hydrographic and Oceanographic Dimension to Marine Spatial Data Infrastructure Development: "Developing the capability" https://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG_Misc/Marine_SDI_Documents/MSDI_white_paper.pdf
- 6. Open Data Commons https://opendatacommons.org/
- 7. Open Definition https://opendefinition.org/guide/data/
- 8. Open Knowledge International https://okfn.org/opendata/
- 9. Open Data Support European Union by PWC https://joinup.ec.europa.eu/sites/default/files/document/2015-05/d2.1.2_training_module_2.5_data_and_metadata_licensing_v1.00_en.pdf
- 10. Standford Libraries https://library.stanford.edu/research/data-management-services/share-and-preserve-research-data/licensing
- 11. The law dictionary https://thelawdictionary.org/license/
- 12. The Open Data Institute https://theodi.org/knowledge-opinion/guides/

