



United Nations
Cultural Organization



Intergovernmental
Oceanographic
Commission



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



International
Oceanographic
Data and Information
Exchange

Report from IODE: Revision of IOC Oceanographic Data Exchange Policy

Sergey Belov, IODE Co-chair

*Fifteenth Meeting of the Working Group on Tsunamis and Other Hazards related
to Sea Level Warning and Mitigation Systems (TOWS-WG-XV) - Online*

24-25 February 2022

Background

Revisions of IOC Oceanographic Data Exchange Policy:

- IOC Assembly (IOC-XXII, June 2003) - *Resolution XXII-6, IOC Oceanographic Data Exchange Policy*
- 25th Session of IODE (February 2019) revised Clause 5 of the policy

The 31st Session of the IOC Assembly (June 2021) recognized that a revision of the 20-year-old IOC data exchange policy was timely and adopted Decision A-31/3.4.2 (International Oceanographic Data and Information Exchange) including part III *Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019)* which established the IOC Intersessional Working Group on the Revision of the IOC Oceanographic Data Exchange Policy (2003, 2019) (IWG-DATAPOLICY)

IWG-DATAPOLICY

Objectives: This working group will:

- (i) create an inventory of existing international, national and organizational data policies,
- (ii) review and compare existing international, national and organizational data policies,
- (iii) develop a glossary with clear definitions (e.g. open vs free and unrestricted; data vs metadata vs information, licence options),
- (iv) investigate the expansion of scope and name of the IOC Oceanographic Data Exchange Policy,
- (v) gather advice from partner/sister organizations and recognized data provider/manager organizations,
- (vi) organize a broad consultation on the proposed revised IOC Ocean Data Policy with Member States, IOC global and regional programmes,
- (vii) submit a revised IOC Oceanographic Data Exchange Policy to the IOC Assembly at its 32nd Session in 2023.

Desk study held by IODE

Data sharing principles

- Open data
- Data licensing
- FAIR data principles
- TRUST data principles
- Data management plan

UN Decade of Ocean Science for Sustainable Development

Data policies

- IODE NODC, ADU and Project Data Policies
- WMO Unified Data Policy
- EU Open Data Directive
- UNESCO Recommendation on Open Science
- The Beijing Declaration on Research Data
- Principles for Polar Data policies
- WDS Data Sharing Principles
- CLIVAR Data Policy

First conclusions and discussion points (1)

- ❑ Many of the data policies reviewed promote and encourage open access to data (GEOSS, OECD, Polar Data Policy, UNESCO Recommendation on Open Science, EU Open Data Directive, Beijing Declaration on Research Data)
- ❑ The assignment of a licence to data adds clarity around permissions for use and re-use and eliminates the need to contact the copyright holder
- ❑ The FAIR Principles have been widely adopted for the management of ocean data

First conclusions and discussion points (2)

- ❑ A Data Management Plan (DMP) is a key element of good data management
- ❑ Core data shall be freely available, with no conditions on use (GCOS ECV and GOOS EOY, data types fundamental to address significant scientific and societal ocean/climate-related issues, etc.)
- ❑ The FAIR Principles have been widely adopted for the management of ocean data

Summary

- The data sharing landscape has changed considerably in the twenty years since the IOC Assembly adopted the IOC Oceanographic Data Exchange Policy in 2003. Open data has entered the mainstream and many countries and organizations actively promote and, in some instances, mandate data sharing and have implemented policies to make data openly available to the maximum extent and with as few restrictions as possible.
- A revised IOC Policy should clarify obligations of Member States with respect to open data, data licensing, FAIR data principles, data management plans and should incorporate these common policy elements. To promote sharing of data, a revised policy should be as open as possible and should only restrict access to data in situations where openly sharing the data is not possible. Any revision of the IOC Policy must take onto consideration the needs of the Ocean Decade, noting the Decade's objective to further strengthen the policy of free, unrestricted and open access to data.
- A two-tiered approach to sharing if data, as has been adopted by WMO for Earth system data, could be applied in the revised IOC Policy if there is a need to separate core and recommended data. This, however, would require defining the lists for these two types of data.

