

## Data Flows and Management

### *Overview of OFI Activities*

At the UN Decade North Atlantic Regional Workshop, co-hosted by OFI and DFO, a transparent and accessible ocean was seen as one of the top priorities of the Decade. Priorities that were identified included improved access to data, including data that are dispersed, duplicated or difficult to access; data sharing and standardization of data collection, including policies to access and exchange of data and information; and the need for infrastructure to streamline data sharing processes. It is considered vital that by the end of the Decade a common operating system for ocean data is developed and operational. Discussions also focused on the need to build national and regional capacity and develop data platforms and centres with a focus on SIDS and LDCs. An inventory of existing and potential data platforms and technologies for collecting and sharing data was recommended. Discussions identified the need for a digital revolution in ocean data by developing artificial intelligence, big data, disruptive technologies and other tools.

Data is one of the three major areas where OFI can contribute at the program level to the UN Decade. The “data footprint” of OFI is international, with data collected and created by research projects made openly available by default, found in public repositories from SOCAT to GenBank to the Ocean Tracking Network. To help enhance the impact of data coming out of OFI projects, OFI goes further in ensuring that ocean data is informing shared regional and global goals, including sustainability, carbon neutrality, and the Blue Economy.

OFI supports major research projects that seek to advance the practice of data management, and the use of artificial intelligence for ocean data analytics. OFI is the “incubator” for CIOOS Atlantic, the regional association covering the northwest Atlantic Ocean for the Canadian Integrated Ocean Observing System. In anticipation of being part of Canada’s contribution to GOOS this Decade, CIOOS has adopted EOVS and standards to ensure data is easily integrated both with GOOS and our nearest neighbours in US IOOS. With time-limited support from Fisheries and Oceans Canada, a national research network (MEOPAR), the member institutions of OFI together with OFI, CIOOS Atlantic is currently healthy, but is not yet sustainably resourced. In collaboration with Canada’s Ocean Supercluster, OFI and CIOOS are connecting with down-stream beneficiaries of ocean observations to better understand their data and information needs. OFI’s core research support team includes data management expertise available to assist in data management planning and the depositing of data. The direct connection of ocean scientists with broad research interests, operational ocean observation expertise, and research expertise focused on data within OFI is a high-potential combination.

The following questions should help guide the Workshop discussions:

1. What current OFI activities in this area align with the UN Decade of Ocean Science for Sustainable Development?
2. With whom (groups, organizations, initiatives) would an alignment support a strong presence under the UN Decade – nationally and internationally?
3. Looking forward, what further actions might OFI take, and/or lead, in this area?
4. Identify who would be appropriate to work with OFI to take these actions forward.