

MEMORANDUM OF UNDERSTANDING BETWEEN
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

AND

NIPPON FOUNDATION-GEBCO SEABED 2030 PROJECT

TO COOPERATE ON AREAS OF MUTUAL INTEREST

(NOS MOA 2022-057_12435)

I-PREAMBLE

The National Oceanic and Atmospheric Administration (NOAA) of the United States of America, the Nippon Foundation-GEBCO Seabed 2030 Project, hereinafter collectively referred to as the "Participants,"

NOTING that The Nippon Foundation-GEBCO Seabed 2030 Project is a collaborative project between the Nippon Foundation of Japan and the General Bathymetric Chart of the Oceans (GEBCO) under the auspices of the International Hydrographic Organization (IHO) and Intergovernmental Oceanographic Commission (IOC).

NOTING the United States is a member of the IOC and IHO and it is in the mutual interests of the Participants to cooperate to improve the quality of services for maritime navigation safety, conserving the marine environment, and promoting the exchange of cartographic, hydrographic, and geodetic information and related services,

UNDERSTANDING the multipurpose potential of mapping data to enhance sustainable use of natural resources and protect the environment,

UNDERSTANDING how the growth in global maritime activities poses challenges to safe navigation,

UNDERSTANDING the hydrography of waters within and beyond the national jurisdiction of the United States and noting these waters are accorded in the Seabed 2030 Project,

UNDERSTANDING improving oceanic maps is of great importance to the planet,

CONSCIOUS of the multiple environmental, economic, and social benefits of enhancing navigational safety, oceanographic research, and scientific discovery,

APPRECIATIVE of the long-standing collaborative relationship between NOAA and the IHO on bathymetric data stewardship and public access reflected, *inter alia*, in the IHO Data Center for Digital Bathymetry (DCDB) established in 1990 (IHO CL 23/1990) pursuant to a proposal by the United States, which continues to host the DCDB,

Intend to cooperate as follows:

II-PURPOSE

- A. The purpose of this Memorandum of Understanding (MOU) is to facilitate cooperation between the Participants regarding the exchange of information and the promotion of joint efforts to map the world's ocean floor by 2030;

- B. This MOU is not intended to create binding legal obligations under international or domestic law. Nothing in this MOU is intended to alter or affect the Participants' responsibilities or abilities to carry out their responsibilities and programs in accordance with their respective applicable authorities, laws and regulations. All activities contemplated in this MOU are subject to the availability of funds, personnel, and other resources.

III-BACKGROUND

- A. NOAA has several responsibilities and authorities for conducting ocean mapping and scientific discovery in waters within and beyond the national jurisdiction of the United States. Ocean mapping conducted by NOAA supports a wide range of interests including safe maritime transportation, effective marine conservation, environmental forecasting, exploration and characterization, and sustainable use of ocean resources as described in the U.S. 2020 National Ocean Mapping, Exploration and Characterization Strategy.
- B. The Nippon Foundation-GEBCO Seabed 2030 Project is a collaborative project of the Nippon Foundation (a private, non-profit, grant-making organization established in 1962) and the General Bathymetric Chart of the Ocean (GEBCO) (a joint project of the International Hydrographic Organization (IHO) and the Intergovernmental Oceanographic Commission (IOC)) launched in 2017 that aims to bring together all available bathymetric data to produce the definitive map of the world ocean floor by 2030 and make it available to all.

IV-AUTHORITIES

- A. NOAA's authorities for the activities contemplated herein are:
 - 1. The Ocean and Coastal Mapping Integration Act, 33 U.S.C. §§ 3501-3507, which charges NOAA to lead the effort to increase mapping data acquisition, data sharing, use of metadata standards, improved interoperability, processing and archive of data and distribution of derived products.
 - 2. The Ocean Exploration Act, 33 U.S.C. §§ 3401-3403, which authorizes a coordinated national ocean exploration program within NOAA. Specifically, the Act authorizes NOAA to explore and survey little known areas of the marine environment, inventory, observe, and assess living and nonliving marine resources, and report such findings and, as appropriate, facilitate coordination of data and information management systems, carry out outreach and education programs to improve public understanding of ocean and coastal resources, and develop and transfer of technologies to facilitate ocean and undersea research and exploration.

3. The Coast and Geodetic Survey Act, 33 U.S.C. §§ 883a *et seq.*, which authorizes NOAA to conduct hydrographic surveys and observations to provide charts and related information for the safe navigation of marine and air commerce, to provide basic data for engineering and scientific purposes, to perform related surveying and mapping activities, including special-purpose maps, and for the preparation and publication of the results thereof.
4. The Hydrographic Services Improvement Act, 33 U.S.C. §§ 892-892d, which directs NOAA to acquire and disseminate hydrographic data and provide hydrographic services; promulgate standards for hydrographic data; ensure comprehensive geographic coverage of hydrographic services and maintain a national database of hydrographic data, in cooperation with other appropriate Federal agencies; and participate in the development of, and implement for the United States in cooperation with other appropriate Federal agencies, international standards for hydrographic data and hydrographic services.

V-COOPERATION ACTIVITIES

A. Cooperation among the Participants is intended to include, but is not limited to,

1. Exchanging information related to ocean mapping;
2. Sharing publicly available bathymetric data with the responsible stakeholders and partners of the Seabed 2030 Project and the IHO Data Center for Digital Bathymetry (DCDB), as appropriate and consistent with established guidelines;
3. Archiving and publicly distributing bathymetric data used for the Seabed 2030 Project by the IHO DCDB, hosted by NOAA;
4. Sharing best practices in applying standards and protocols developed to collect ocean seafloor data and to make that data available and accessible;
5. Advocating for and developing partnerships with stakeholder groups to collect and distribute all available ocean floor data;
6. Pursuing other activities of mutual interest related to achieving the goals of the Seabed 2030 Project to map the world's ocean floor by 2030.
7. Exchanging information to promote safety, efficiency and best practices;
8. Developing common "best practice" guidelines and methodologies;
9. Collaboration among technical personnel of the Participants;

10. Researching and developing improved methods and technology to support and advance ocean science, navigation safety, the sustainable use and conservation of the global oceans;
11. Capacity building and training;
12. Outreach and communications; and
13. Other activities as mutually decided.

VI-FUNDING ARRANGEMENTS

- A. Each Participant intends to arrange funding for the costs associated with any travel or other activities of its staff or contractors. Any cost-sharing arrangement is to be documented by a separate arrangement between the Participants.
- B. This MOU defines in general terms the basis on which the Participants intend to cooperate and, as such, does not constitute a fiscal or funds obligation document.

VII-PARTICIPANT POINTS OF CONTACT

- A. Each Participant's principal point of contact for carrying out the activities contemplated under this MOU are the following:

1. For the United States of America:

Name: John Nyberg
Title: Deputy Hydrographer, Office of Coast Survey, National Ocean Service,
NOAA
Address: 1315 East West Hwy 6th Floor
Silver Spring, MD 20910
United States of America
Email: john.nyberg@noaa.gov

and

Name: Jennifer Jencks
Title: Physical Scientist, National Centers for Environmental Information,
National Environmental Satellite, Data, and Information Service, NOAA
(Serving as Director, IHO Data Center for Digital Bathymetry)
Address: 325 Broadway, E/NE42
Boulder, Colorado 80305

Email: United States of America
jennifer.jencks@noaa.gov

and

Name: Rachel Medley
Title: Chief, Office of Ocean Exploration & Research, Office of Oceanic and Atmospheric Research, NOAA
Address: 1315 East West Hwy 2nd Floor
Silver Spring, MD 20910
United States of America
Email: rachel.medley@noaa.gov

2. For the Nippon Foundation-GEBCO Seabed 2030 Project:

Name: Jamie-McMichael Phillips
Title: Director, Seabed 2030 Project
Address: % Seabed 2030 Arctic and Pacific Ocean Regional Center
University of New Hampshire
Jere A. Chase Ocean Engineering Lab
24 Colovos Road
Durham, New Hampshire 03824
United States of America
Web Address: <https://seabed2030.org/>
Email: director@seabed2030.org

- B. If there is a change to any point of contact or their contact information, the Participant making the change is to notify the other Participant in writing.

VIII-DURATION, MODIFICATIONS, OR DISCONTINUATION

- A. Cooperation under this MOU may commence upon signature by both Participants and is intended to remain in place for a period of five years. The Participants intend to review the provisions of this MOU at least one year prior to the MOU's expiration date, to decide whether to extend the MOU, as written or with adjustments.
- B. A Participant may discontinue its participation in this MOU at any time, in which case it intends to provide sixty (60) calendar days' advance written notice to the other Participant. The MOU may be modified at any time through mutual written decisions of the Participants.

IX-OTHER PROVISIONS

- A. If the Participants have differing views on how to interpret this MOU, they intend to present their differences to each other in writing, and intend to discuss them.

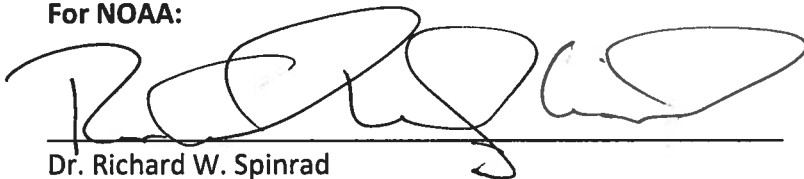
- B. The Participants intend that English will be the working language for all cooperative activities undertaken by them under this MOU.

X-Signatures

This MOU becomes operational upon the last affixed Participant signature below.

Each signatory warrants and affirms that they have the authority to enter into this MOU on behalf of their respective Participant.

For NOAA:



Dr. Richard W. Spinrad
Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator
Date:

For Nippon Foundation-GEBCO Seabed 2030 Project:



Jamie McMichael-Phillips
Director, Nippon Foundation-GEBCO Seabed 2030 Project
Date: