

## CITIZEN SOURCED DATA via The Nippon Foundation-GEBCO Seabed 2030 Project

# DATA COLLECTION BY HUMANITY, FOR HUMANITY

#### **CROWDSOURCED DEPTH INFORMATION**

Government, University, and private vessels can participate in The Nippon Foundation-GEBCO Seabed 2030 Project effort of producing the definitive map of our ocean floor by sharing depth measurements from navigation instruments. Known as Crowdsourced Bathymetry (CSB), this information can help identify uncharted features such as seamounts and canyons, verify charted information, and help fill the gaps where no data exists.

Many vessels that work and sail the world's coastal areas and oceans, do so in areas where data is sparse, out of date, and inaccurate or of poor quality. These are exactly the places where contributions to the Seabed 2030 Project can have the greatest impact.

To minimise effort on the part of the ship's crew, data collection and contribution can occur by using built-in navigation software systems that are participating in the CSB initiative or through a small hardware data logger that can be provided by Seabed 2030 and interfaced to the ship's GNSS and depth sounder. Routinely measured parameters such as depth and position, can then be stored, uploaded and contributed to local and global mapping initiatives, including Seabed 2030. In addition to filling gaps along the seafloor, these contributions could also benefit navigational safety, detect unknown hazards, and aid other scientists in planning their research.

#### KEVIN MACKAY HEAD OF SEABED 2030 SOUTH & WEST PACIFIC DATA CENTER

"We find that the biggest motivation for people wanting to get involved in the CSB program is being able to easily participate in a global initiative that is revolutionary in our understanding of our ocean".

#### The IHO CSB Initiative & Seabed 2030

The International Hydrographic Organization CSB Initiative is encouraging volunteer observers who operate vessels-of-opportunity using modern technology to collect data in areas where surveys are poor, inadequate, non-existent or where the seafloor is changeable and hydrographic assets may not be readily available. The intent is for these data to be provided to the entire marine geospatial community, through the IHO Data Centre for Digital Bathymetry (IHO DCDB) and incorporated into the publicly available GEBCO global grid.

#### DR MATHIAS JONAS IHO SECRETARY GENERAL

"Getting to know the ocean is the greatest mapping adventure of our times. Many underwater mountain ranges, volcanoes, canyons have yet to be discovered and named."

Seabed 2030 is a collaborative project between The Nippon Foundation in Japan and the General Bathymetric Chart of the Oceans (GEBCO) with a mission of inspiring 100% mapping of the ocean floor and making it freely available to all by 2030. Seabed 2030 comprises five Data Centers – four Regional Centers and one Global Center – which are responsible for coordinating and assembling mapping data.

In addition to producing and delivering global GEBCO products, Seabed 2030 also works alongside the IHO's Crowdsourced Bathymetry (CSB) initiative and is equipped to supply data logging equipment or software, provide technical support to vessels, download data from data loggers or remotely log data from shore sites, aggregate collected data and facilitate the data transfer – all we need you to do is volunteer to get involved! It may even be possible for us to provide you with a unique plot of your data once it has been integrated into our grids!

### CONTRIBUTING DATA

The IHO's Data Centre for Digital Bathymetry (DCDB) accepts CSB data contributions through "trusted nodes" or organizations, companies or universities that serve as data aggregators and / or liaisons between mariners (data collectors) and the DCDB. Seabed 2030 has established itself as a "trusted node" for the global community.

It is simply a case of submitting the data files to the team at the Seabed 2030 Global Center by email or via a file-sharing site. Contributed data should include depth, position and time stamp. While additional information is encouraged, data does not need to include vessel name, IMO number or anything else with the vessel identification prior to uploading to the IHO DCDB database. By contributing data to Seabed 2030 and the IHO DCDB, the provider will not be held liable for the data submitted.



Further information about collecting or contributing data can be found at the IHO DCDB website **ngdc.noaa.gov/iho/** or by contacting the Seabed 2030 team at **csb@seabed2030.org**.

Visit **seabed2030.org** to learn more about The Nippon Foundation-GEBCO Seabed 2030 project and **see this video** for further information on mapping the oceans through citizen science.

# SEABED 2030

THE NIPPON FOUNDATION-GEBCO





United Nations Decade of Ocean Science for Sustainable Development