

GEBCO Statement

GEBCO - inspiring and coordinating the global effort to map the ocean floor

Scientists' vision of portraying the World Ocean floor on a series of maps inspired the initiation of the General Bathymetric Chart of the Oceans (GEBCO) in 1903. The birth of GEBCO followed from efforts by Prince Albert I of Monaco and Professor Julien Thoulet, University of Nancy, who both shared a strong passion for the ocean. This vision of portraying the depth and shape of the World ocean floor remains at the heart of GEBCO. Over the last 100 years, the ambition has evolved from developing a general bathymetric chart of the deep ocean to producing:

... a high-resolution digital map, from the coast to the deepest trench of the ocean that enables scientists to explore and understand how the ocean works, informs maritime policy and supports the management of natural marine resources for a sustainable Blue Economy.

GEBCO's ideas and vision follow from societal needs, scientific curiosity and technological developments. Knowing the bathymetry, i.e. depth of the ocean floor, is today recognized to be of vital importance not only for navigation and coastal management but also a growing variety of inter-related uses. Bathymetry is a fundamental parameter for studies of deep water circulation, tides, tsunami forecasting, upwelling, fishing resources, wave action, sediment transport, environmental change, slope stability, paleoceanography, site selection for platforms, cables, pipelines and renewables, waste disposal and mineral extraction and much more.

The satellite era has brought the capability to capture a general view of the shape of deep ocean floor. Beyond this general view are the high-resolution bathymetric details required to understand critical ocean processes and to manage our ocean resources. These details must be revealed using modern acoustic mapping technologies requiring coordination beyond individual national boundaries. As a project of both the International Hydrographic Organization (IHO) and Intergovernmental Oceanographic Commission (IOC) of UNESCO, GEBCO is in the best position to undertake a global coordinated effort to map the ocean floor, identify the areas of greatest need so that efforts can be prioritized and to increase the recognition of the importance of bathymetry in intergovernmental forums.

GEBCO recognizes that vast areas of the World ocean floor, especially those at great distances from coastal and national areas of jurisdiction, are far from adequately mapped. Mapping from the coasts to the deepest trench involves reaching beneath the virtually unknown realms of Polar ice shelves and pack ice covered oceans. These environments are less known today than the deep ocean was for Prince Albert I and Professor Julien Thoulet more than 100 years ago.

The journey towards GEBCO realizing our ambition of a global high-resolution digital map involves and requires that:

- GEBCO, as an IHO and IOC project, being recognized as THE place to go for a wide range of global ocean mapping related information, data, products and expertise.
- GEBCO being the home of IHO and IOC ocean mapping expertise with a pool of people who are leaders in all aspects of this field. They include technology experts in industry as well as research organizations who work to develop leading edge technology, practical at-sea surveying experts, data processing experts, database managers, software developers, geologists and geophysicists and other relevant ocean scientists. These experts share a passion for GEBCO's vision, work with ocean mapping projects and advise groups and individuals involved with ocean mapping.
- GEBCO being universally respected as an IHO and IOC project, free of any
 political bias or constraints, enabling it to gather bathymetric data and
 resources from any nation, industry or governmental, research, academic
 organization. In return, GEBCO provides information back to all the
 communities and the public.

GEBCO is committed to achieving this ambition through building the necessary technical, scientific and management capacity and by engaging with groups involved in the same pursuit. By managing training initiatives such as the Nippon Foundation/GEBCO Training Program at University of New Hampshire and bringing like-minded people together, GEBCO will continue to link individuals and organizations worldwide and enhance existing global networks to drive ocean mapping and a deeper understanding of the current and ancient processes shaping the ocean floor.