

The General Bathymetry Chart of the Ocean

OUR STRATEGY 2023-2030

FINAL Draft [27 Oct 2023]

Our vision

To bring knowledge about our seabed to everyone on the planet

Our mission

To produce free, open and complete seabed datasets and information of the world's oceans. We do that by enabling and inspiring seabed mapping efforts through international collaboration, capacity development, and education.

1 Introduction

The present structure of the General Bathymetric Chart of the Ocean (GEBCO) reflects its long evolution since its creation in 1903 by Prince Albert I of Monaco, including its successes and the opportunities created through many transitions over the years.

GEBCO has a rich history; its successes are numerous and global.¹ Today, GEBCO is an internationally recognised and well-respected program that operates under the auspices of the International Hydrographic Organisation (IHO) and Intergovernmental Oceanographic Commission (IOC) of United Nations Educational, Scientific and Cultural Organization (UNESCO). While both parent organisations have their own respective strategies, GEBCO has here developed its own strategy.

This strategy endows GEBCO with an expansive and ambitious mission that propels us into the twenty-first century. Until today GEBCO has proudly upheld its original mission to deliver “the most authoritative, publicly available bathymetry of the world’s oceans” by providing bathymetric data to the world. Bathymetry, as the science of measuring ocean depth to the seabed, is foundational to ocean sciences. It underpins disciplines ranging from hydrography and oceanography to marine geology and ecology. Bathymetry encompasses the mapping and charting of underwater features and the topography of the ocean floor.

This strategy aims to:

- support a dedicated governance that strives to increase GEBCO’s visibility and relevance in a world more aware of the importance of the ocean.
- provide vision and mission to see GEBCO’s outcomes lasting over multiple generations.
- broaden GEBCO's focus to encompass seabed data and datasets, including bathymetry and its derivatives, positioning the program firmly in the twenty-first century.
- provide clarity of GEBCO’s direction within the complex structure and relationships between parent organisations, subcommittees and subordinate projects.
- ensure that GEBCO complements and supports the parent organisations objectives.
- ensure that our subcommittees and subordinate projects have the support they require to optimise their work and outcomes.

Our parent organisations

The present strategy supports the missions and objectives of our parent organisations - the IHO and the IOC of UNESCO - and recognises their leading and supporting roles to our organisation.²

IHO’s vision is to be the authoritative worldwide hydrographic body, actively engaging all coastal and interested States to advance maritime safety and efficiency³, while supporting the protection and sustainable use of the marine environment. Its mission is to create a global environment in which coastal states provide adequate, standardised and timely hydrographic data, products and services, and ensure their widest possible use.

¹ See 100 year of GEBCO

² IHO Strategic Plan for 2021-2026 and Draft IOC medium-term strategy for 2022–2029 (41 c/4)

³ IHO Strategic Plan for 2021-2026 p.3

IOC's vision is to bring together governments and the science community to achieve the 'Ocean We Need for the Future We Want'. Its mission is to promote international cooperation and coordinate programmes in research, services and capacity-building to increase knowledge about the nature and resources of the ocean and coastal areas. The IOC sees that knowledge is applied for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of all coastal state

2 GEBCO's vision and mission

The scientific knowledge derived from ocean sciences is critical to achieving all six outcomes of the United Nations Decade of Ocean Science for Sustainable Development (the Ocean Decade), which our parents organisations strongly support.

GEBCO therefore takes seabed data and information at the heart of its pursuit with:

- A **vision** to bring knowledge about our seabed to everyone on the planet; and
- A **mission** to produce free, open and complete seabed datasets of the world's oceans by enabling and inspiring seabed mapping efforts through international capacity development, education, and collaboration.

3 Outcomes and Objectives

GEBCO's outcomes and objectives are organised through five pillars critical to achieving its Mission and Vision: Data, Technologies and Standards, Capacity, Community, and Governance.

GEBCO will contribute to the overarching Ocean Decade outcomes, whereby our Oceans will be clean, healthy and resilient, productive, predictable, safe, accessible as well as and inspiring and engaging.

GEBCO will champion seabed mapping activities toward the creation of a definitive map of the world ocean floor by fully backing the Nippon Foundation - GEBCO Seabed 2030 project which aims to compile and deliver a complete seabed map for our world oceans.

To achieve its mission, GEBCO therefore seeks the following outcomes and objectives that respect and build on our vision, while supporting our parent organisations' goals, for each of the five pillars.

3.1 Data

GEBCO supports, promotes and encourages the acquisition, compilation, curation, distribution and scientific use of bathymetry and other seabed data and information acquired during hydrographic survey and ocean mapping. Seabed data, including bathymetric data in the first instance, are based on scientific-evidence, engineering and technological innovation.

Outcomes

- a fully explored and well understood global seabed supporting improved scientific knowledge and decision making on sustainable ocean management, conservation and economy of our planet.
- open and equitable (free and easy) access to comprehensive seabed datasets and information for everyone

Objective

- To compile, maintain and improve the most accurate, reliable and relevant seabed datasets based on internationally approved geospatial standards focused on bathymetry and the authoritative GEBCO Gazetteer of Undersea Feature Names.

3.2 Technology and standards

Seafloor mapping has evolved over the life of GEBCO from lead lines to sonar to multibeam echosounders. The future is bringing new technologies which are and will be critical to the success of GEBCO's mission.

GEBCO supports technological innovation and the development and adoption of standards as a means to better achieve its mission. Through technology and standards, GEBCO aims at serving and advising on the technical aspects of building and use of GEBCO datasets and products.

Outcome

- Innovative technologies and standards that improve the seabed data value chain and maximise benefits for GEBCO and the broader community.

Objective

- To actively support, promote and use innovative solutions to continuously improve our seabed data value chain, including solutions contributing to ocean management, conservation and economy of our planet.

3.3 Capacity

GEBCO aims to assist in developing science capacity, mobilise scientists, facilitate an enabling environment for engagement of practitioners and decision makers from all sectors in the development and use of science-based solutions. Through its endorsement of the pledges made by both the IOC and IHO, GEBCO supports capability and capability development, including through its continuous support to the substantial human resources provided by the GEBCO alumni network and the Nippon Foundation - GEBCO Seabed 2030 project. This will be accomplished via stakeholder engagement, communications, and capacity development / training.

Outcome

- An engaged, qualified and diverse global community of professionals inspired to support GEBCO in executing its mission and vision.

Objectives

- Establish a globally distributed network of facilities and experts to support communication, encourage education and promote training.
- To double global ocean mapping capacity in the next five years.

3.4 Community

Developing and nurturing a diverse, global and dynamic community sharing a vision and a will to achieve our mission for the benefit of our ocean is key for the success of GEBCO.

Outcome

- A diverse community that understands the importance of GEBCO and engages and actively contributes to the program.

Objectives

- Increase engagement with the general public to improve their awareness of the relevance of GEBCO's work
- Seek ongoing support of global leadership from all sectors and parent organisations for GEBCO.

3.5 Governance

Ensuring synchronisation and coherence between GEBCO Guiding Committee's governance and strategy is critical for formulating a clear vision and ensuring the effective execution of the strategy. The development of a Governance review encompassing stakeholder engagement, organizational structure mapping, legal framework assessment, governance instrument gap analysis, and financial status review will provide means to enhance oversight and accountability of GEBCO.

Outcomes

- An adequately funded long-term program under the IHO and IOC.
- An improved coordination of ocean mapping efforts that maximise benefits to all ocean stakeholders.

Objectives

- To build a sustainable GEBCO Marine Spatial Data Infrastructure (MSDI).
- To influence policy through robust science-based evidence to increasing support for sustained public and industry seabed mapping.

4 Principles and strategies to deliver our objectives.

To deliver its strategy in the most effective way, GEBCO endorses the following principles:

- Support the IOC and IHO in engaging with national government and coordinating efforts, including for waters under national sovereignty from a coastal state and national government perspective.

- Leverage our parent organisations, subcommittees, subordinate projects and other relevant initiatives, including the GEBCO's Nippon Foundation Seabed 2030 project as our flagship project to deliver a complete bathymetric map of the oceans.
- Ensure the entire ocean space is considered by focusing our efforts on both the areas beyond national jurisdictions (ABNJ) as well as regions under national sovereignty.
- Ensure open, diverse, equitable and inclusive cultures striving for outcomes that are overarching, ambitious, and span generations, gender, cultures, nations, and sectors.

5 A better future

After 120 years of activity GEBCO more than ever must think about the future it wants for the ocean for the coming generations. GEBCO's future activities will continue to aim at improving our knowledge of the ocean through striving to increase free and easy access to seabed datasets and related knowledge. Beyond 2030, GEBCO is committed to sustaining the significant momentum built in the field of ocean science during the early part of the twenty-first century, primarily through the groundbreaking efforts of the Nippon Foundation Seabed 2030 project and the United Nations Decade of Ocean Science for Sustainable Development, ensuring their dynamic achievements continue into the next decade.

New initiatives, partnerships, and projects should be freely discussed, as long as they follow the fundamental principles of GEBCO as set in this strategy, have a clear purpose.

A better or an enhanced future for GEBCO could include but is certainly not limited to

- the promoting and acquisition of an expanding type of datasets pertinent to the ocean floor and benthic ecosystems, and immediate sub-seafloor. This is to support the enhanced understanding of the seafloor in a three-dimensional context.
- Support coastal communities and indigenous knowledge.
- Continue to support ocean literacy to raise the awareness, knowledge and caring about the ocean.
- Endeavour to promote the development of new technology for the benefit of seafloor datasets and products and promote their use