



IHB File N° S3/2636

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### REQUEST FOR SHALLOW WATER BATHYMETRIC DATA

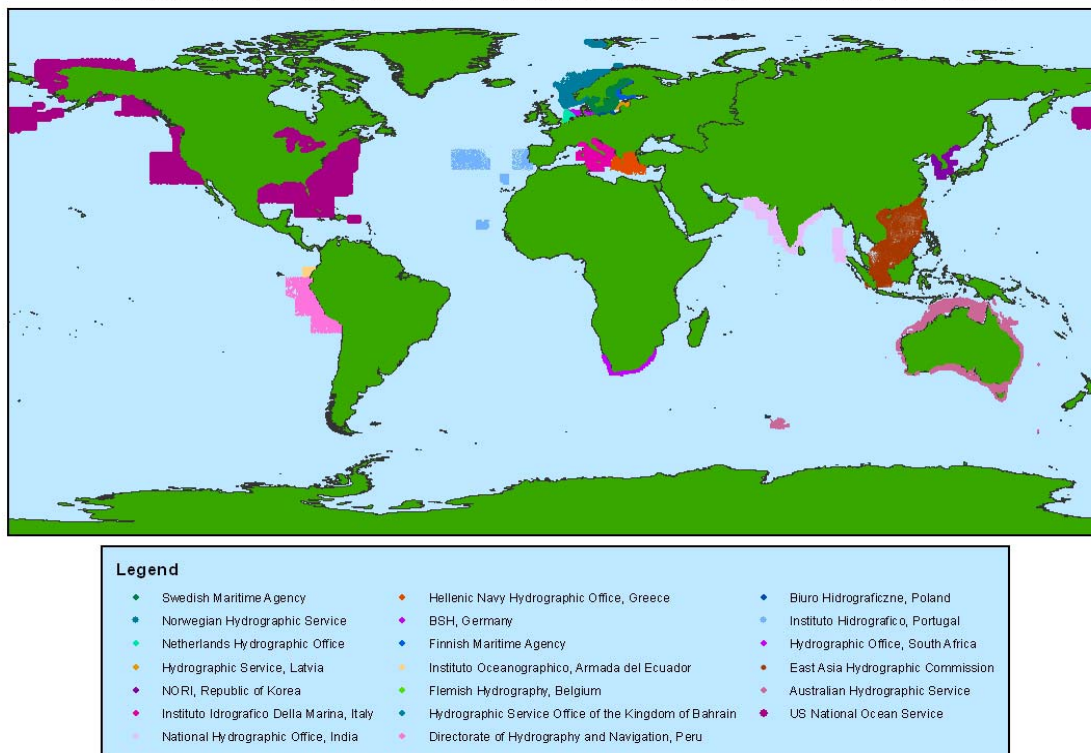
- References
- a) IHB CL 36/2006 dated 28 March
  - b) IHB CL 14/2007 Dated 2 February

Dear Hydrographer,

1 As part of the continuing work to improve the IHO/IOC GEBCO digital bathymetric products, the Directing Committee is happy to report that IHO Member States have made substantial contributions to the IHO/IOC GEBCO bathymetric source data, which have resulted in significant improvements to the IHO/IOC GEBCO products. These contributions include deep ocean passage soundings, and more recently, shallow water soundings harvested from ENC's (as shown in Figure 1 below).

2 During 2009, presentations on the status and importance of bathymetric information were provided at several Regional Hydrographic Commission meetings. This resulted in additional data being made available for IHO/IOC GEBCO use.

Distribution of data sets contributed to GEBCO to improve its grids in shallow water areas



**Figure 1**  
(Shallow Water Bathymetry Provided by IHO Member States)

3 One of IHO/IOC GEBCO's primary aims is to provide the most authoritative, publicly available, bathymetric products of the world's oceans in formats that can readily be used by oceanographic, hydrographic, scientific and other communities.

4 The IHO/IOC GEBCO project is committed to producing the best possible bathymetric grids that are not only visually pleasing, but also scientifically correct. These grids are periodically updated to reflect new source data and are freely available for download from the IHO/IOC GEBCO web-site (<http://www.gebco.net>),

5 In order to continue to improve its bathymetric products, IHO/IOC GEBCO invites those Member States who have not provided shallow water bathymetry for their coastal areas, to do so. Free software is available to help with the extraction of the requested data from ENC usage bands 2 and 3. Further information on data requirements was provided at reference (a) above). All data should be sent to the IHB ([pad@ihb.mc](mailto:pad@ihb.mc)).

6 In order to ensure that all bathymetric data derived from navigational products (e.g. ENCs) are used and maintained in a responsible way, the IHO/IOC GEBCO Technical Sub Committee on Ocean Mapping (TSCOM) has produced a text (See Annex 1) outlining how these data will be managed.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in blue ink, appearing to be 'H. Gorziglia', written in a cursive style.

Captain Hugo GORZIGLIA  
Director

## **Clarification of IHO/IOC GEBCO's need for, and intended use of, shallow water bathymetry data contributed by volunteering hydrographic offices**

In order to improve IHO/IOC GEBCO's generalized global bathymetric model, hydrographic offices were asked, in IHB CL 36/2006 and 14/2007, to volunteer to contribute shallow water bathymetry data to IHO/IOC GEBCO. This document is intended to clarify:

- Why IHO/IOC GEBCO is requesting the contribution of shallow water bathymetry data
- What type of data IHO/IOC GEBCO is requesting
- How IHO/IOC GEBCO shall use the data.
- The policies regarding the use and distribution of the data.

### **Why does IHO/IOC GEBCO need shallow water data?**

Historically, IHO/IOC GEBCO's bathymetric model was in the form of contours only, and the shallowest contour was the 200 meter (m) contour; IHO/IOC GEBCO had no need for data in water shallower than 200 m.

However, there are scientific, educational and other human needs for a generalized bathymetric model of the oceans that extends seamlessly from shore to shore. Tsunamis, currents and other ocean phenomena move between deep and shallow water.

Modeling of these phenomena is facilitated by IHO/IOC GEBCO's global grid products, which inevitably include grid points in shallow water. IHO/IOC GEBCO would like its model to be as accurate as is possible. To that end, IHO/IOC GEBCO asks hydrographic offices to volunteer to contribute data to IHO/IOC GEBCO to improve IHO/IOC GEBCO's generalized global bathymetric model.

### **What data does IHO/IOC GEBCO need?**

IHO Member States collectively hold vast amounts of shallow water bathymetric data that could make a significant improvement to the IHO-IOC GEBCO product and other similar products such as the International Bathymetric Chart (IBC) series.

In order for this data to be useful for gridding purposes, however, it needs to be in a digital format, and must be consistent in structure and content, (e.g. data format, projection and density).

A number of Hydrographic Offices have provided significant amounts of data covering their coastal zones, however there is still a pressing requirement for improved shallow water bathymetry in most coastal areas.

### **What is IHO/IOC GEBCO's intended use of the data?**

IHO/IOC GEBCO produces, maintains and updates a generalized bathymetric model of the global ocean. Products of this model distributed by IHO/IOC GEBCO may include grids, contours, and paper maps.

IHO/IOC GEBCO recognizes that production of nautical charts, in analogue or digital form, is a specific task of the Hydrographic Offices, as established by IMO within SOLAS Chapter V. IHO/IOC GEBCO never has, does not now, and will not in the future produce navigational charts or any products intended for purposes of maritime safety.

It has always been IHO/IOC GEBCO's policy that IHO/IOC GEBCO models and products are **not to be used** for navigation.

## **Policies for the use and distribution of shallow water bathymetry data**

The following outlines IHO/IOC GEBCO's policies concerning the use and distribution of shallow water bathymetric data contributed by IHO MS to IHO/IOC GEBCO for the improvement of its bathymetric models.

Policy for **"Upstream"** Data, that is, data input to IHO/IOC GEBCO to enable improvement of IHO/IOC GEBCO's bathymetric models

Occasionally an IHO/IOC GEBCO data centre (e.g. IHO-DCDB or BODC) may receive requests for the data it has used to compile its products and data contributors are therefore requested to specify if their data are already publicly available; are to be made available through an IHO/IOC GEBCO data centre; or are to only be used by IHO/IOC GEBCO to build its models, and are not to be made available for other purposes.

1. If the data are already publicly available, then the data policy already attached to public distribution of the data shall apply. IHO/IOC GEBCO shall not change in any way the terms of use attached to those data.
2. If the data may be released by an IHO/IOC GEBCO data centre then the centre will specify the following when the data is released:
  - the data are not to be used for commercial purposes unless authorized by the data originator;
  - the data are not to be passed to third parties without prior permission of the data owner;
  - the source provider shall be acknowledged whenever data is used;
  - THE DATA MUST NOT BE USED FOR NAVIGATION OR FOR ANY OTHER PURPOSE RELATING TO SAFETY AT SEA.
3. If the data contributor restricts the supplied data to the use of constructing and improving the IHO/IOC GEBCO bathymetric model:
  - IHO/IOC GEBCO shall make the data available only to those who are involved in constructing and updating the IHO/IOC GEBCO model;
  - IHO/IOC GEBCO shall inform those persons of the restrictions attached to the data, and in particular, that the data are not to be released to third parties.

Policy for **"Downstream"** Data, that is, digital bathymetric models built by IHO/IOC GEBCO from contributed data ("models" includes grids and contours derived from the model).

As part of the agreement for the use of data from its bathymetric data sets and models, IHO/IOC GEBCO will specify that:

- the data are not used for commercial purposes without specific authorization
- are not passed on to third parties without prior authorization
- in any use of the data, IHO/IOC GEBCO shall be acknowledged
- THE DATA MUST NOT BE USED FOR NAVIGATION OR FOR ANY OTHER PURPOSE RELATING TO SAFETY AT SEA.