



THIS CIRCULAR LETTER REQUIRES YOU TO VOTE

IHB Files No. S3/2675 & S3/6000

CIRCULAR LETTER 62/2008  
24 July 2008

REVIEW OF IHO TECHNICAL RESOLUTIONS BY THE GEBCO GUIDING COMMITTEE (GGC)

Dear Hydrographer,

1 As part of its ongoing review of the IHO Technical and Administrative Resolutions (M-3), the IHB invited the GGC to review the following resolutions: A4.3; A5.1; A5.2; A5.3; and K2.1. The GGC has completed its review and proposes that: A4.3 be retained unchanged; A5.1, A5.2 and A5.3 be amended as shown in Annex A; and that K2.1 be deleted.

2 Following the adoption of revised ToRs for the GGC and its subsidiary bodies (CL 24/2008 dated 5 March) the IHB has made an editorial correction to TR A4.3 to align paragraph 1a with the text already approved by Member States in Circular Letter 24/2008. The IHB believes that this does not need further approval by Member States and it has therefore not been included on the voting form at Annex C.

3 The GGC also provided suggested amendments to TR A1.5 and these were forwarded to the CHRIS Chair Group which had previously been asked to review this resolution. The CHRIS Chair Group considered that the detailed text provided by the GGC was more appropriate to other publications than to a Technical Resolution. This information is covered in the IHO Manual on Hydrography (M-13).

4 Annex A provides the existing resolutions with new *text* in italics and deleted ~~text~~ with strikethrough. All changes are highlighted. Annex B provides a "clean" copy of the revised resolutions A4.3, A5.1, A5.2 and A5.3. A voting form is provided at Annex C.

5 Member States are requested to return the completed voting form to the IHB by **30 September 2008**.

On behalf of the Directing Committee  
Yours sincerely,

A handwritten signature in blue ink, appearing to read "Hugo Gorziglia". The signature is stylized and written in a cursive-like font.

Captain Hugo GORZIGLIA  
Director

Annex A: Existing Resolution including amendments highlighted  
Annex B: "Clean" copy  
Annex C: Voting Form

#### A4.3 NAMING OF UNDERSEA FEATURES

- 1.- It is agreed that Member States should strongly encourage marine scientists and other persons in their country wishing to name undersea features to:
  - a) check their proposals with published Gazetteers of Undersea Feature Names, including the IHO/IOC publication B-8, "Gazetteer of Geographical Names of Undersea Features" shown (or which might be added) ~~on the~~ to GEBCO *graphical and digital products*, ~~and~~ on the IHO small scale International Chart Series and ~~its supplements of Geographical Names included on the larger scale~~ Regional International Bathymetric Chart Series;
  - b) take into account the guidelines contained in the IHO/IOC publication B-6 "Standardization of Undersea Feature Names", including the use of the Undersea Feature Name Proposal Form contained therein;
  - c) submit all proposed new names for clearance either to their appropriate national authority or, where no such national authority exists, to the IHB or IOC for consideration by the GEBCO Sub-Committee on Undersea Feature Names, which may advise on any potential confusing duplication of names.
- 2.- It is agreed that Member States invite publishers of ocean maps and editors of scientific journals in their country to require compilers and authors to provide written evidence of such clearance before accepting for publication any maps or scientific articles containing new names for undersea features.

#### A5.1 ~~CARRYING OUT OF~~ COLLECTING OCEANIC SOUNDINGS

- 1.- It is strongly recommended that Hydrographic Offices include in their ~~programmes of work the carrying out of~~ regular and systematic surveys of ocean areas beyond their continental shelves ~~using as far as possible, the radio aids best suited for position fixing.~~
- 2.- It is recommended that when Hydrographic Offices plan oceanic surveys they attach sufficient importance to obtaining data which will be useful not only for navigation purposes but also for promoting knowledge of the morphology of the sea floor.
- 3.- It is recommended that Hydrographic Offices interested in the same oceanic areas arrive at an understanding among themselves regarding a suitable division of their zones of activity.
- 4.- It is recommended that, as concerns oceanic soundings, Hydrographic Offices work in close cooperation with the oceanographic bodies of their respective countries and use a standard procedure for recording data.
- 5.- It is recommended that ships fitted with ~~echo sounding apparatus~~ *MBES or SBES* be requested to take *oceanic bathymetric* soundings, ~~preferably using machines calibrated for a sounding velocity of 1 500 metres per second,~~ and communicate the results of such soundings to the Hydrographic Offices of their respective countries with all information required to enable their accuracy to be estimated. *The use of sound velocity calibration in accordance with the guidance set out in the IHO Manual on Hydrography (M-13) is recommended.*

6.- *It is recommended that newly-discovered topographic undersea features should be properly mapped and named following the "Standardization of Undersea Feature Names" IHO-IOC Publication B-6.*

*See also A1.5.*

## A5.2 OCEANIC PLOTTING SHEETS

1.- It is resolved that oceanic soundings, together with the *metadata and potential additional required* supplementary information, shall be collected and exchanged *mainly in digital form.* ~~on oceanic plotting sheets or lists, or, if possible, and if the receiving Hydrographic Office is suitably equipped, in the form of media compatible with electronic data processing.~~

a) ~~The required supplementary information is specified as follows:~~

- ~~i) The name of the vessel.~~
- ~~ii) All fixes together with their times and dates.~~
- ~~iii) The make and type of echo-sounder used.~~
- ~~iv) Details of the speed of sound at which the machine is calibrated.~~
- ~~v) Details of any corrections which have been applied to the soundings before plotting (i.e. from H.D. 282 for true depth).~~
- ~~vi) Estimated accuracy of fixing methods in use.~~

*Metadata should comprise at least information on:*

- the survey in general as e.g. date, area, equipment used, name of survey platform;*
- the geodetic reference system used, i.e. horizontal and vertical datum; including ties to WGS 84 if a local datum is used;*
- calibration procedures and results;*
- sound velocity;*
- positioning information e.g. GPS, RT-DGPS, GLONASS, GALILEO*
- tidal datum and reduction (if applicable); and*
- accuracies achieved and the respective confidence levels.*

*See also A1.5.*

## A5.3 CENTRALIZATION OF OCEANIC SOUNDINGS

1.- ~~Owing to the development from analogue to digital methods of collecting, rendering and storing data, it is resolved that the setting up of two routes for the centralization of oceanic soundings is necessary.~~ Full details of the information required to accompany the data, and the criteria for its quality control, are contained in the GEBCO Guidelines (IHO Publication B-7).

2.- *Data Storage and exchange of data.*

*Member States are requested to remind institutions and organizations within their own country of the desirability of collecting bathymetric data, whenever possible, in the course of*

*oceanographic missions.*

*It is recommended that Member States inform the IHB of any details concerning recent bathymetric data collected by themselves or by other national institutions and organizations, about which they may have been notified. The standard format below should be used for this purpose:*

- a) Country of origin.*
- b) Institution or authority responsible for the mission.*
- c) Name of vessel which carried out the soundings.*
- d) Date (month and year).*
- e) Location (general sea area or significant points along track).*
- f) Terms under which data may be obtained (address for requests, method of ordering, price, or whether free on a mutual data exchange basis, etc.).*

*The IHB will issue an annual CL requesting such information.*

*All bathymetric data collected should be forwarded by HOs to the IHO Data Centre for Digital Bathymetry (DCDB). Any format convenient to the individual HO may be used; but the data must be accompanied by comprehensive format documentation and metadata. The IHO DCDB should be notified of digital data that have been found to be in error; if possible, a corrected version should be submitted as well.*

### *3.- Information concerning Recent Bathymetric Data IHO Publication B-4*

*At the beginning of each calendar year, the IHB shall make available an updated version of the online publication B-4 showing all bathymetric data received during the preceding year. These data will be available for download from the IHO DCDB in several digital formats, which include MGD 77, HYD 93 and delimited xyz ASCII.*

## 2. Analogue data

~~Each Volunteering Hydrographic Office (VHO) participating in the GEBCO work, or in any of the regional International Bathymetric Chart projects, shall be responsible for centralizing all oceanic soundings for the zone for which it has accepted responsibility.~~

- ~~a) The Catalogue of Bathymetric Plotting Sheets – World Series, Scale 1:1M, and Regional Series, Scale 1:250 000, published by the IHB as IHO/IOC B-2, shall contain a list of the VHOs, together with index charts including the allocation of areas for which the VHOs are responsible. Information on the status of plotting sheets is also issued by the IHB as an Annex to this Catalogue: IHO/IOC B-3.~~
- ~~b) The Hydrographic Offices (HOs) of Member States are invited to facilitate the role of the VHOs by inviting the attention of institutions and organizations within their own country to the desirability of collecting bathymetric data, whenever possible, in the course of oceanographic missions.~~

~~2.1 In addition to the bathymetric data that they have collected themselves, which is already reported in their "annual report" and disseminated in the I.H. Bulletin, it is recommended that Member States' HOs inform the IHB of any details concerning recent analogue bathymetric data collected by their own national institutions and organizations,~~

about which they may have been notified. The standard form to be used for this purpose in respect of each mission or expedition shall be based on the format below. Following the annual request made by Circular Letter, the forms may be sent to the IHB.

- a) Country of origin.
- b) Institution or authority responsible for the mission.
- c) Name of vessel which carried out the sounding.
- d) Date (month and year).
- e) Location (general sea area or significant points along track).
- f) Form of data available (survey sheet, soundings along track, bottom profile, listed depths, magnetic tape, etc.).
- g) No(s) of bathymetric plotting sheet(s) concerned (Indexes of areas as shown in Catalogue B-2 above are normally to be used).
- h) Terms under which copies of the data may be obtained (address for requests, method of ordering, price of copies, or whether free on a mutual data exchange basis, etc.).

### 3. Digital data

Bathymetric data collected in digital form should be forwarded by HOs to the IHO Data Centre for Digital Bathymetry (DCDB). Any format convenient to the individual HO may be used; but the data must be accompanied by comprehensive format documentation.

Digital data that have been found to be in error should be notified to the IHO DCDB; if possible, a corrected version should be submitted also.

### 4. B-4 "Information concerning Recent Bathymetric Data"

At the beginning of each calendar year, the IHB shall publish B-4 in two parts:

- a) Part 1, Analogue Data  
containing lists of analogue bathymetric data, received in the course of the preceding 12 months, available from Member States' HOs.

Those HOs wishing to procure these data may make their request to the originating country, either direct or through the intermediary of the IHB.

- b) Part 2, Digital Data  
containing graphic plots of track inventories and lists of digital bathymetric data. This information, supplied by the IHO DCDB, advertises all new digital data received by the IHO DCDB in the 12 months up to 31 December last.

The data will be available, in MGD 77 format, either directly from the DCDB or through the intermediary of the IHB.

The DCDB will also supply a list of cruises for which data have been notified as no longer valid.

**The XIth Conference,**

1. ——— Adopted the Report of the Working Group on the Classification Criteria for Deep Ocean Soundings.
2. ——— Requested the Bureau to publish as a Special Publication the classification criteria contained in the above Report, after amendments to take into account recent technological advances, and to update the publication periodically.

#### A4.3 NAMING OF UNDERSEA FEATURES

1.- It is agreed that Member States should strongly encourage marine scientists and other persons in their country wishing to name undersea features to:

- a) check their proposals with published Gazetteers of Undersea Feature Names, including the IHO/IOC publication B-8, "Gazetteer of Geographical Names of Undersea Features" shown (or which might be added) to GEBCO graphical and digital products, on the IHO small scale International Chart Series and on the Regional International Bathymetric Chart Series;
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Metadata should comprise at least information on:

- the survey in general as e.g. date, area, equipment used, name of survey platform;
- the geodetic reference system used, i.e. horizontal and vertical datum; including ties to WGS 84 if a local datum is used;
- calibration procedures and results;
- sound velocity;
- positioning information e.g. GPS, RT-DGPS, GLONASS, GALILEO
- tidal datum and reduction (if applicable); and
- accuracies achieved and the respective confidence levels.

*See also A1.5.*

## A5.3 CENTRALIZATION OF OCEANIC SOUNDINGS

1.- Full details of the information required to accompany data, and the criteria for its quality control, are contained in the GEBCO Guidelines (IHO Publication B-7).

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**VOTING FORM**

*(to be returned to the IHB by 30 September 2008*

*E-mail: [info@ihb.mc](mailto:info@ihb.mc) - Fax: +377 93 10 81 40)*

Member State: .....

**Adoption of new / amended Technical Resolutions**

**Do you approve the amendments to TR A 5.1**

**YES**

**NO**

**Comments (if any):**

**Do you approve the amendments to TR A 5.2**

**YES**

**NO**

**Comments (if any):**

**Do you approve the amendments to TR A 5.3**

**YES**

**NO**

**Comments (if any):**

**Do you approve the deletion of TR K 2.1**

**YES**

**NO**

**Comments (if any):**

Name / Signature .....

Date: .....