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**CIRCULAR LETTER 47/2012  
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**NEW BATHYMETRIC PUBLICATION – IHO-IOC GEBCO COOK BOOK (B-11)**

- References:
- a) IHB CL 06/2012 – New Bathymetric Publications, dated 24 January
  - b) IHB CL 21/2012 – Withdrawal of IHB CL 06/2012, dated 16 February
  - c) IHB CL 30/2012 - New Bathymetric Publication – IHO-IOC GEBCO Cook Book (B-11), dated 8 March

Dear Hydrographer,

1 The IHB would like to thank the following 41 Member States who replied to reference c): Argentina; Australia; Brazil; Canada; China; Croatia; Denmark, Ecuador; Estonia; Iceland; Finland; France; Germany; India; Ireland; Italy; Japan; Korea, Rep of; Latvia; Mexico; Morocco; Netherlands; New Zealand; Nigeria; Norway; Oman; Papua New Guinea; Peru; Poland; Qatar; Romania; Russian Federation; Saudi Arabia; Singapore; South Africa; Sweden; Tunisia; Turkey; Ukraine; UK; and the USA. All 41 Member States approved the adoption of B-11. Three Member States provided comments and these are included at the Annex together with comments from Dr Karen Marks, the Chief Editor of B-11.

2 There are currently 80 Member States of the IHO with two States suspended. Therefore, in accordance with paragraph 6 of Article VI of the Convention on the IHO, the majority required for adoption of the definitions is 39. Consequently, the IHO-IOC GEBCO Cook Book has been adopted by IHO as Publication B-11. It will now be forwarded to IOC for approval. Member States are therefore requested to liaise with their national representatives to the IOC and urge them to support the adoption of the IHO-IOC GEBCO Cook Book when the matter is debated within the IOC. Once IOC concurrence is received the “Draft” watermark will be removed from the publication that can be found in the IHO website under Standards and Publications.

On behalf of the Directing Committee  
Yours sincerely,

Captain Hugo GORZIGLIA  
Director

Annex A: Comments by Member States

**COMMENTS BY MEMBER STATES**

**France:**

France supports the publication of B-11 but suggests a possible change of title to read: IHO-IOC GEBCO Guide (for the preparation of gridded datasets) (Guide or Cook Book)

France congratulates the members of TSCOM and Dr. Karen Marks in particular for the excellent work achieved. So as not to hinder the approval procedure, France approves this document as it stands. For future editions, France suggests that the draft "IHO-IOC GEBCO Rules" goes through the normal approval procedure used for IHO publications, and from this point of view that the draft should first be submitted to the relevant main committee (IRCC) to which GEBCO reports (by symmetry with HSSC procedures). France notes in particular that a certain number of elements that could be interpreted as advertising particular tools or projects would merit being carefully examined to ensure that they do not undermine IHO's impartiality. Other remarks to consider for the next edition are as follows:

- The document is aimed at presenting rules for the gridding of bathymetric data. At this stage, it essentially describes a series of possible methods of depicting modelized structures in the form of a grid. It is a shame that no comparison of the methods was made and that the "guide" or "recipe" aspect is not more explicit. This publication should be further developed to better specify this limit;
- The different methods presented cover a very wide spectrum, including R&D. Some of these methods may not be easily exploitable. Efforts have been made to separate into distinct chapters the so-called advanced methods from the basic concepts. At a later stage, it would probably be better to distinguish between two distinct parts, one aimed more at users, the other more directed at specialists in Digital Terrain Model (DTM). At this stage, it is indeed rather difficult to clearly establish which public this document is intended for: DTM specialists likely to provide input for GEBCO? or the final users of GEBCO who want to know the limits of the model?
- As regards the form and in keeping with the previous remark, some of the chapters/sections are taken from scientific articles, and their comprehension may prove difficult for non-specialised people. It would be worth simplifying them or for their context to be more clearly explained.
- The document uses computer codes. It would certainly be better to place these codes in annex, or, better still, to make them available on a web site.
- The document should clearly highlight the fact that the use of the data and the methods presented are not directly applicable to the techniques of choice of soundings used in hydrography and nautical charting for safety of navigation purposes.

As the vocation of the document is to provide educational resources, without it being a "standard", France then suggests to continue developing this document in order to further improve it. The above suggestions are submitted for the consideration of the Editorial Committee of the B-11 publication for this purpose.

*Comment by IHB: These comments have been passed to Dr Marks and will be given due consideration as work on this publication progresses.*

**Germany:**

GRIDDING EXAMPLES (Chapter 2.0):

There seems to be an overlap with Chapter 8.0, where different Methods with concrete examples are being dealt with. It may be wiser to embrace comprehensible examples in Chapter 8.

The use of websites dealing with geodata, that are mentioned in the Cook-Book, could be more clearly structured. Thus step-by step instructions for discrete Data Centers would not be necessary. (See Chapters 2.1.1, 5.1 and 5.2). In Chapter 4.0, the freely available software MB-System should be incorporated. This would be especially helpful for the educational sector.

"MB-System is an open source software package for the processing and display of bathymetry and backscatter imagery data derived from multibeam, interferometry, and sidescan sonars."

<http://www.ldeo.columbia.edu/res/pi/MB-System/>

The Chapters 4.1 and 4.2. are quite comprehensive. It can be assumed that users, who are working with complex software like ArcGIS or CARIS would prefer to use the respective manual instead of using the Cook-Book.

**Comments from Dr Marks:** *The comments from Germany are very helpful, especially the one to include a chapter on MB-System. In my upcoming e-mail to the Cook Book Working group I can ask for a contribution on MB-System, by someone who uses it.*

*There is an intentional overlap between Chapters 2.0 and 8.0. At the last GEBCO meeting the Cook Book group decided that there should be a very basic section upfront, that a complete novice could follow to learn how to make a grid of xyz data, with an example data set provided. In this case the overlap is a good thing, because Chapter 2.0 achieves the goal of really making it possible for a novice to follow the step-by-step instructions and produce a grid and to compare it to the shown results to make sure it was done properly. The intent of Chapter 8.0 is to allow a more in-depth look at gridding, which is more suitable for experienced users.*

*In the interest of trying to make it as easy as possible for novice and beginning users to access geodata websites, it seems that step-by-step instructions remain helpful. An interesting idea comes up as a result of this comment though perhaps we can have a chapter that just shows step-by-step instructions for using the various data websites.*

*Yes, Chapters 4.1 and 4.2 are very comprehensive. A goal of our working group was to have information on ArcGIS, CARIS, and other software packages available for examination by users who may not yet have the software. One does expect that users who own the software would consult their respective manuals.*

#### **Japan:**

In regard to the fact that the way to use multi beam data of JAMSTEC is introduced in the draft of cook book, we inquired of JAMSTEC and received their comments.

They appreciate that their site is introduced in the cookbook. However, the database is planned to be substantially updated around the middle of fiscal year 2012 (April 2012 to March 2013) and then the present data site will be closed at the end of fiscal year 2012, in earlier case. It should be noted in the Cook Book when the database of JAMSTEC was updated.

In addition, they ask to insert the following text after the 3<sup>rd</sup> line of page 79 of the cook book.

Users are requested user registration:

(<https://www.godac.jamstec.go.jp/cruisedata/e/userRegistS.html>) before downloading data.

**Comments from Dr Marks:** *I will make the requested change in the Cook Book. Since I generally check their website every day to see if new data are available, I should know right away when they switch to a new one.*