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CIRCULAR LETTER 67/2004 11 October 2004

WORKING GROUP ON S-44 STANDARDS FOR HYDROGRAPHIC SURVEYS

Reference: CL 37/2004 dated 21 June

Dear Hydrographer,

In the above referenced Circular Letter, the IHB sought the approval of Member States for its intention to re-convene the Working Group (WG) on S-44 and asked for nominations to the WG. The IHB thanks the 18 Member States who replied to the CL, all of whom supported the re-convening of the WG. The comments made by individual countries are listed at Annex A. Eleven countries have nominated members for the WG and these are listed at Annex B. Draft Terms of Reference for the Working Group are attached at Annex C.

Member States are invited to respond to the IHB on the following topics by 10 December:

- 1. Comment on / propose changes to the draft TORs.
- 2. Suggest specific items that the WG should consider, if these have not already been mentioned.
- 3. Propose their representative as the Chairman / Vice Chairman of the WG, as desired, in accordance with IHO Resolution T1.1.
- 4. Suggest names of possible observers from Academia and Industry who could participate in the business of the WG.

On behalf of the Directing Committee Yours sincerely, (original signed)

Vice Admiral Alexandros MARATOS President

Annex A: Member States comments Annex B: Nominations to the WG Annex C: Draft Terms of Reference

Member States' comments on re-convening the S-44 WG

Argentina

This office agrees that there is a need to review the S-44 Publication. We agree also with the arguments expressed by Australia, specially concerning the increasing use of the Multibeam Echo Sounder (MBES) and its possibilities.

However, because the Argentinean Republic has not installed this technology yet we cannot propose a member with enough experience for the S-44 WG. But we still propose our collaboration, giving our opinion about preliminary versions of the document to be issued and translating into Spanish the resulting final version.

Australia

Supports the re-convening of S-44 WG

Canada

Supports the re-convening of S-44 WG

Chile

SHOA agrees with the production of an updated edition of S-44 and would like to nominate a member for the WG with the necessary field experience to meet the requirements of the task.

Denmark

Supports the re-convening of S-44 WG

Finland

Supports the re-convening of S-44 WG

France

In view of the points raised by Australia, France supports the re-convening of the S-44 WG.

Germany

The current edition has brought a substantial improvement regarding the uniform quality of hydrographic surveys worldwide. This led to a lot of changes in the daily work, e.g. a resurvey plan for the entire area of the Baltic Sea Hydrographic Commission and a complete review of the German survey plan. It would perhaps make sense to gain some more experiences with these changes.

On the other hand, there are undoubtedly some parts of the S-44 which should be reviewed some time in the future, e.g. inconsistencies between the quality measures of S-44 and the CATZOCs of S-57.

Germany is willing to take part in a review of S-44, either now or in a few years.

Greece

Supports the re-convening of S-44 WG

<u>Italy</u>

Italy agrees with Australia's view on S-44 Standard for Hydrographic Surveys current edition and the need to re-convene the relative WG.

<u>Japan</u>

Supports the reconvening of S-44 WG

Republic of Korea

Supports the re-convening of S-44 WG

<u>Russia</u>

Qualitative changes in the development of new technical aids, new survey technologies that occurred during the past six years after the publication of S-44, 4th Edition "Standards for Hydrographic Surveys" and, therefore, more stringent requirements for hydrographic data, make it reasonable to consider the proposal of the Australian HO "to review completely the current edition of the standards quite timely.

The Russian HO fully agrees with the examples stated in the letter of Australia from items of S-44 current edition which require to be reviewed and corrected.

We think that while reviewing S-44 a particular accent should be given to the necessity of more realistic approach to the assessment of the possibilities of modern technical developments and first of all to the assessment of the possibilities of multibeam echo sounders (MBES) widely used now.

The resolution of the modern MBES ensures detection of three-dimensional (cubic) objects during bottom survey, their size is expressed not in metres (Table 1, S-44) but in decimetres.

This fact to our mind may be in favour of the following, probably very audacious conclusion: isn't it time to consider the area survey by MBES, provided the appropriate metrological support is ensured, to be alternative to mechanical sweeping.

We have no objections against the meeting of the S-44 Working Group.

Sweden

Strongly supports the re-convening of S-44 WG

<u>Tunisia</u>

Tunisia has no objection to re-convene the S-44 WG

<u>Turkey</u> TN-DNHO supports the idea of the S-44 WG to be re-convened to undertake a full review of the current edition and the subsequent publication of a revised edition that takes into account the latest technology and contemporary requirements for hydrographic data.

United Kingdom

The United Kingdom strongly endorses the proposal to re-convene the S-44 WG and will give its full support to the update of this important guidance on minimum standards for hydrographic surveys.

USA (NOAA)

Supports the re-convening of S-44 WG

Membership of the Working Group on Standards for Hydrographic Surveys (S-44)

Lt Cdr Peter Johnson
Rob Hare
No name as yet
Ingénieur principal Patrick Michaux
Bernd Vahrenkamp
Lt Marco Grassi
Shin Tani
Seong-kyo Kong
Lars Jakobsson
Chris Howlett and Lt Cdr David Wyatt
Jerry Mills

<u>DRAFT</u> <u>IHO WG on Standards for Hydrographic Surveys (S-44) - Terms of Reference (October</u> <u>2004)</u>

Introduction:

S-44 provides minimum standards for hydrographic surveys. It therefore needs to be reviewed on a periodical basis in order to take account of technical developments in surveying equipment and procedures.

The following note is taken from the Preface to the 4th Edition (1998) of S-44:

It should be noted that the issue of a new standard does not invalidate charts and nautical publications based on previous standards, but rather sets the standards for future data collection to better respond to user needs

Membership:

Membership of the IHO Working Group on Standards for Hydrographic Surveys is open to all Member States wishing to participate. The IHB will also be represented. The Working Group may invite observers from academia and industry to participate in its work both during and between meetings. Observers are not entitled to vote.

Organization:

The Chairperson will conduct the business of the Working Group. Business will be conducted mainly by correspondence. Meetings of the Working Group will only be held when it is considered necessary to progress the tasks of the Working Group

Objectives:

- 1. To review the text of the 4th Edition and identify where improvements can be made.
- To prepare a draft 5th Edition of IHO publication Standards for Hydrographic Surveys (S-44) for approval by Member States. When undertaking this task the WG should consider, as a minimum, the following matters:
 - a. The widespread use of swath echo sounders.
 - b. The increasing use of airborne 'LIDAR' echo sounders.
 - c. The need for clearer guidance on the description of seabed features ("targets") that should be detected during hydrographic surveys.
 - d. The need for, and specify as necessary, metadata requirements for hydrographic surveys. Consideration should be given to metadata requirements specified in other related IHO documents (e.g. S-57).
 - e. The need for retention of Annex A to the 4th Edition (Classification Criteria for Deep Sea Soundings). This formed Chapter 2 in the 3rd Edition and was retained, for historical reasons, without amendment in the 4th edition.

Procedure:

- 1. The Chairperson is to submit a report for inclusion in the IHO Annual Report.
- 2. Should the Chairperson be unable to exercise his/her function the Vice-Chairperson will take over.
- 3. The Working Group should aim to submit a draft 5th Edition to Member States for approval in 2006.
- 4. The IHB will provide secretarial support to the Working Group.