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CIRCULAR LETTER No. 75/2003
10 December 2003

IHO PUBLICATION M-4

REGULATIONS OF THE IHO FOR INTERNATIONAL (INT) CHARTS and CHART SPECIFICATIONS OF THE IHO

References:
1) Publication M-4 - Regulations of the IHO for International (INT) Charts and Chart Specifications of the IHO (permanently updated by means of change-pages).
2) Decisions 17 (d) and 17 (f) of the XVIth International Hydrographic Conference.
3) IHO Technical Resolutions B 5.6 and K 2.11.

Dear Hydrographer,

With the Chart Standardization and Paper Chart Working Group (CSPCWG) assuming the functions of the former Chart Standardization Committee (CSC) and the adoption of the new IHO Technical Resolution B5.6 replacing the former TRs B5.1 and B5.3 [see Decisions 17(d) and 17(f) of the XVIth IHC], some "cosmetic" changes are necessary to TRs B5.6 and K2.11 and to some pages in M-4. Publication M-3 "Resolutions of the IHO" has been amended accordingly and the updated version will be placed on the IHO website. The resulting change-pages to M-4 is enclosed as Correction 1-2003 (additional paper copies may be obtained from the IHB, on request). Correction 1-2003 is also available from the IHO website for download.

The amendments contained in Correction 1-2003 have been applied to the digital version of M-4 (English), which is marked "Updated to December 2003" and available from the IHO website. The digital version is identical to the hard copy version of M-4, which has been kept updated by means of change-pages distributed in paper format. The French and Spanish versions of M-4 are being prepared in digital format and will be placed on the IHO website as soon as they are ready.

Hard copy change-pages have been issued so far in accordance with the Preface to M-4 which states:

> *"The adoption of a loose-leaf format has eliminated the need for new editions and extensive hand-corrections as change pages, incorporating amendments to text and graphics, will be issued whenever amendments come into force."*

This tedious procedure, whereby the IHB prepares and issues printed change-pages to M-4, often in colour, and in three languages, predates the digital era. Today most IHO

publications are mainly, if not exclusively, issued in digital form (e.g. CD-ROM, e-mail or Internet). Moreover, savings in resources by transitioning to digital publications has enabled staff to focus on priority technical issues and maintained low operating expenses. Additionally, effecting complex changes in hard copy format is particularly cumbersome and anticipated future changes to M-4 (e.g. ESSAs, ASL) where new specifications with substantial text may be added in the middle of a section of M-4, will be more easily accommodated in digital format alone. In brief, it is the IHB's opinion that the focus should be on the chart specification number, rather than the M-4 page number, that any updating procedure should be in digital form only, and that the current system of the IHB issuing hard copy change-pages to M-4 should be discontinued.

Subject to Member States' objections and CSPCWG future deliberations, the preface to M-4 will be changed to reflect this procedure of issuing digital new editions rather than hard copy change pages. As with other digital publications, any Member State requiring continued hard copy distribution may request such from the IHB. Your comments are welcomed.

On behalf of the Directing Committee
Yours sincerely,

(original signed)

Rear Admiral Kenneth BARBOR
Director

Encls.: Correction 1-2003 to M-4

IHO PUBLICATION M-4

REGULATIONS OF THE IHO FOR INTERNATIONAL (INT) CHARTS AND CHART SPECIFICATIONS OF THE IHO

CORRECTION No. 1-2003

Reference: Circular Letter 75/2003

The following change-pages to IHO Publication M-4 should be inserted, as explained in the above Circular Letter.

Correction N° 3/2003 is also available from the IHO website (www.iho.shom.fr), "Publications" section.

Rear Admiral Kenneth BARBOR

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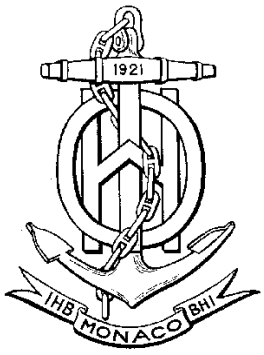
INTERNATIONAL HYDROGRAPHIC ORGANIZATION



REGULATIONS OF THE IHO FOR INTERNATIONAL (INT) CHARTS

and

CHART SPECIFICATIONS OF THE IHO

Updated to December 2003

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Published by the International Hydrographic Bureau
MONACO

M-4

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LIST OF EFFECTIVE PAGES

Numbering	Pages in Force	Numbering	Pages in force
I (reverse blank)	Corr. 1-2000	**PART B**	
III (reverse blank)	Corr. 1-2001		
V	Corr. 1-2003	B-1 (reverse blank)	Original
VI	Corr. 1-2001	B-3 (reverse blank)	Corr. 1-2003
VII	Corr. 1-2001		
VIII	Corr. 1-2003	**Section 100**	
IX (reverse blank)	Corr. 1-2001		
		B-100.i (reverse blank)	Original
PART A		B-100.iii	Corr. 1-2003
		B-100.iv	Original
A-1 (reverse blank)	Corr. 1-2000	B-100.v (reverse blank)	Corr. 1-90
A-3 (reverse blank)	Corr. 1-2000	B-100.1	Corr. 1-2003
A-5 (reverse blank)	Corr. 1-2003	B-100.2	Original
A-7 (reverse blank)	Corr. 1-2000	B-100.3	Original
		B-100.4	Original
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A-100.1	Corr. 1-2000	B-100.7	Original
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A-100.3	Corr. 1-2000	B-100.9	Original
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		B-100.13	Original
A-200.1	Corr. 1.2000	B-100.14	Original
A-200.2	Corr. 1-2000	B-100.15	Original
A-200.3	Corr. 1-2000	B-100.16	Original
A-200.4	Corr. 1-2000		
A-200.5 (reverse blank)	Corr. 1-2000		
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Section 300			
		B-200.i (reverse blank)	Original
A-300.1	Corr. 1.2000	B-200.iii	Corr. 1-90
A-300.2	Corr. 1-2000	B-200.iv	Original
		B-200.v (reverse blank)	Original
Section 400		B-200.1	Original
		B-200.2	Original
A-400.1	Corr. 1-2000	B-200.3	Original
A-400.2	Corr. 1-2000	B-200.4	Original
A-400.3	Corr. 1-2000	B-200.5	Original
A-400.4	Corr. 1.2000	B-200.6	Original
		B-200.7	Original
Section 500		B-200.8	Original
		B-200.9	Original
A-500.1	Corr. 1-2000	B-200.10	Corr. 1-90
A-500.2	Corr. 1-2000	B-200.11	Original
		B-200.12	Original
Section 600		B-200.13	Original
		B-200.14	Original
A-600.1 (reverse blank)	Corr. 1-2000	B-200.15	Original
		B-200.16	Original
		B-200.17 (reverse blank)	Original

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Numbering	Pages in Force	Numbering	Pages in Force
Section 300		**Section 400**	
B-300.i (reverse blank)	Original	B-400.i (reverse blank)	Original
B-300.iii	Corr. 1-90	B-400.iii	Corr. 1-95
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B-300.vi	Corr. 1-90	B-400.vi	Corr. 1-94
B-300.1	Original	B-400.vii	Corr. 1-94
B-300.2	Original	B-400.viii	Corr. 1-94
B-300.3	Original	B-400.ix (reverse blank)	Corr. 1-94
B-300.4	Original	B-400.1	Original
B-300.5	Original	B-400.2	Original
B-300.6	Original	B-400.3	Original
B-300.7	Original	B-400.4	Original
B-300.8	Original	B-400.5	Original
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B-300.11	Original	B-400.8	Original
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B-300.18	Original	B-400.15	Original
B-300.19	Original	B-400.16	Original
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B-300.21	Original	B-400.18	Original
B-300.22	Original	B-400.19	Original
B-300.23	Original	B-400.20	Original
B-300.24	Original	B-400.21	Original
B-300.25	Original	B-400.22	Original
B-300.26	Original	B-400.23	Original
B-300.27	Original	B-400.24	Original
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B-300.29	Original	B-400.26	Original
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B-300.32	Original	B-400.29	Corr. 1-90
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B-400.43	Original	B-400.98	Original
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B-400.46	Original	B-400.101	Corr. 1-94
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B-400.55	Original	B-400.110	Corr. 1-94
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B-400.61	Original	B-400.116	Original
B-400.62	Original	B-400.117	Original
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B-400.74	Original	B-400.129	Original
B-400.75	Original	B-400.130	Original
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B-400.85	Original	B-500.iv	Original
B-400.86	Original	B-500.v (reverse blank)	Original
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B-400.89	Corr. 1-94	B-500.3	Original
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B-400.91	Corr. 1-94	B-500.5	Original
B-400.92	Original	B-500.6	Original
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B-400.94	Original	B-500.8	Original
B-400.95	Original	B-500.9	Original
B-400.96	Original	B-500.10	Original
B-400.97	Original		

LIST OF EFFECTIVE PAGES (continued)

Numbering	Pages in Force	Numbering	Pages in Force
Section 600		B-IND.34	Corr. 1-96
		B-IND.35	Corr. 1-96
B-600.i (reverse blank)	Original	B-IND.36	Corr. 1-96
B-600.iii	Original	B-IND.37 (reverse blank)	Corr. 1-96
B-600.iv	Original		
B-600.v (reverse blank)	Original		
B-600.1	Original	**PART C**	
B-600.2	Original		
B-600.3	Original	C-1 (reverse blank)	Corr. 1-2001
B-600.4	Original	C-3	Corr. 1-2001
B-600.5	Original	C-4	Corr. 1-2001
B-600.6	Original	C-5 (reverse blank)	Corr. 1-2003
B-600.7	Original	C-7 (reverse blank)	Corr. 1-2003
B-600.8	Original		
B-600.9	Original	**Section 100**	
B-600.10	Original		
B-600.11 (reverse blank)	Original	C-100.1 (reverse blank)	Corr. 1-2003
		Section 200	
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		C-200.1	Corr. 1-2001
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B-IND.12	Corr. 1-96	C-400.3	Corr. 1-2001
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B-IND.22	Corr. 1-96	C-IND.i (reverse blank)	Corr. 1-2001
B-IND.23	Corr. 1-96	C-IND.1	Corr. 1-2001
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B-IND.28	Corr. 1-96	C-IND.6	Corr. 1-2001
B-IND.29	Corr. 1-96	C-IND.7	Corr. 1-2001
B-IND.30	Corr. 1-96	C-IND.8	Corr. 1-2001
B-IND.31	Corr. 1-96	C-IND.9	Corr. 1-2001
B-IND.32	Corr. 1-96	C-IND.10	Corr. 1-2001
B-IND.33	Corr. 1-96	C-IND.11 (reverse blank)	Corr. 1-2001

INTRODUCTION

In his opening speech at the second International Hydrographic Conference in 1926, Admiral J M PHAFF, the President of the Directing Committee of the IHB at that time, said:

'In a time-worn and completely forgotten pamphlet which was published in Washington, in 1884, Mr E R KNORR, the Chief Draughtsman of a Hydrographic surveying expedition of the United States of America, had already proposed the issue of original charts and he gave figures showing the enormous economies which could be effected if all the nations which publish charts of the same coast or port were to come to an understanding as to the reproduction of these charts on a common basis. This far-seeing man pleaded also for a permanent international Hydrographic institution, giving numerous examples showing the necessity for its existence, and he states that his proposal to convene an international Conference on the subject succeeded to the extent that two Governments actually came into communication with reference to such convocation.

It required the perspicacity of Monsieur RENAUD (*) to rediscover this same obstacle, which impelled him to write an article on the International Chart which appeared in the French "Annales Hydrographiques" of 1918. Following up this idea, the advantages of an international Conference to discuss the subject came likewise to his mind and, as soon as the support of the British Hydrographer was assured, the first really International Hydrographic Conference, the dream of Mr KNORR, was conceived.

These two Chiefs, both of them professional men, well aware of the intricacies of the subject, did not belittle the enormous difficulties which they would have to overcome.'

The draft IHO Regulations for International Charts were compiled from the reports, agreements and studies of the North Sea International Chart Commission. They were amended and agreed by the Chart Specifications Committee and its successor, the Chart Standardization Committee, and were finally completed in 1984. Thus, 100 years after the publishing of Mr Knorr's pamphlet, his vision became reality.

The Chart Standardization and Paper Chart Working Group (CSPCWG) (**), the successor to the CSC, is responsible for the updating of the Regulations, and all proposals for changes are referred by the IHB to the CSPCWG for advice (TR B5.6 refers). After discussion, the CSPCWG will recommend amendments to the IHB who will then communicate them to all IHO Members by Circular Letter, asking for any comments within three months. After three months, in the absence of objections from one or more Members, the IHB will announce, by a second Circular Letter, that the amendments have come into force and that Members should consequently correct their copies of the Regulations. If necessary, the proposed amendments will be modified to take account of objections or suggestions received and an explanation will be given in the second Circular Letter, which will also promulgate the final version. The Record of Corrections, which follows this Introduction, should be updated when it is announced that amendments have been approved. It is intended that this Record should also serve as a Bibliography.

(*) Ingénieur Hydrographe M J A RENAUD was a founder of the IHB, but died just before the election of Directors in May 1919.
(**) CSPCWG is a sub-group of the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS).

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INTRODUCTION

This is the Second edition of the 'Chart Specifications of the IHO for Medium- and Large-scale National and International charts'. It is in six sections, the contents of which are:

100	General
200	Format, positions, compass roses
300	Topography
400	Hydrography and navigational aids
500	Geographic Names, lettering, numerals
600	Latticed charts

The conventions used in the Specifications, and other general matters, are explained in Section B-100, which should be read before consulting the other Sections.

An index for those Specifications is given at the end of Part B. The list of items is in alphabetical order and the following principles have been used:

Duplication has been avoided as far as possible in not repeating initial headings (indents and hyphens used) and in cross-referencing entries (details entered under the most obvious heading with other headings marked as "see ..."");

Main entries have been kept as full as possible e.g., all types of buoy are given under "Buoy" heading, to show the range of possibilities.

Updating of these Specifications is effected by changes announced in the IHB's Circular Letters. The procedures by which changes are initiated, discussed and promulgated are described in B-160. If an IHO Member State finds it necessary to adopt a new specification or use a new symbol for a feature for which there is no existing symbol, the Member should advise the Bureau of the action taken at the earliest opportunity with a view to its consideration for possible incorporation in these Specifications (IHO TR K2.11).

The Record of Corrections, at the beginning of each Section, should be updated when it is announced that changes have been approved. It is intended that this record should also serve as a Bibliography.

Charts affected: These Specifications (apart from a few paragraphs prefixed or suffixed "I", eg. I-351.1 which apply only to international charts) are applicable to all large- and medium-scale charts, national and international. Members producing or printing international charts should also consult Part A "Regulations of the IHO for International Charts" and, if concerned with charts on 1:2 000 000 or smaller scale, Part C, which gives specifications for small-scale international charts.

Acknowledgement. Symbology is partially reproduced from Admiralty Chart 5011 (based on INT 1 originally produced by Germany) by permission of the Controller of Her Majesty's Stationery Office and the UK Hydrographic Office.

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SECTION 100 - GENERAL

RECORD OF CORRECTIONS

Specification Number	Correction Number	Circular Letters		Remarks
		Promul-gated by	Approved by	
Section 100 Preliminary Edition	—	9/1982	—	Adopted by 1982 Conference, Decision No. 23
B-130	1/1985	30/1985	4/1986	
B-131	1/1985	30/1985	4/1986	
B-130/B-131	—	—	—	Included in Cumulative corr. 1/1986
B-130	—	6/1987	—	Corrected typing error in Cumulative corr. 1/1986
B-160	—	—	—	Amended by 1987 Conference, Decision No. 24
B-170-B-179	1/1987	16/1987	27/1987	
Section 100 1988 Edition	—		—	New loose-leaf edition -- including editorial updating.
B-128	1/1990	47/1990	—	New specification
B-101	1-2003	75/2003	---	CSC replaced with CSPCWG
B-160	1-2003	75/2003	---	CSC replaced with CSPCWG

Specification Number	Amendment Number	Circular Letters		Remarks
		Promul-gated by	Approved by	

SECTION 100 - GENERAL

B-101 SPECIFICATIONS: ORIGIN AND METHOD

The Specifications were originally compiled by two groups of member countries of the IHO, forming successively, the North Sea International Chart Commission (NSICC, 1972-1977) and the **Chart Specifications Committee (1977-1982)**. The NSICC's members were Canada, Denmark, France, Germany, Iceland, Netherlands, Norway, Sweden, UK and USA (Defense Mapping Agency and National Ocean Service). The Chart Specifications Committee consisted of the same countries with the exception of Iceland, Norway and Sweden, and the addition of Australia, Brazil, Chile Egypt, India, Indonesia, Italy, Japan, New Zealand and USSR. At the XIIth I.H. Conference (April 1982) the Chart Specifications Committee was renamed the **Chart Standardization Committee (CSC)** with an unchanged membership. The CSC, now renamed **Chart Standardization and Paper Chart Working Group (CSPCWG)** (*), have a number of functions, one of which is the responsibility for updating the Specifications - see B-160.

B-101.1 The **working procedure** followed in the compilation of the Specifications was, firstly, the establishment of guidelines for each section by UK which provided the Secretariat. Preliminary drafts were prepared by France (500), Germany (300), Netherlands (200), UK (100, part 400, 600) and USA (part 400). They were subsequently coordinated by the Secretariat which prepared a revised draft, which was reviewed by NSICC and Chart Specifications Committee members before and since 1977 respectively. Comments were reconciled as far as possible by the Secretariat which compiled the final version of each Section.

B-101.2 **Basic compilation principles** followed by the NSICC and Chart Specifications Committee in compiling the Specifications were:

a. the starting point was the former Technical Resolutions on charted detail (Chapter B), now mostly cancelled; but these covered only about one-third of the full range of features to be found on charts;

b. the charting practices of a wide range of IHO members were reviewed by examining their symbols and abbreviations guides and their latest charts;

c. change for its own sake was at all times avoided;

d. the need was recognized to ensure that each separate item fitted logically into a consistent whole;

e. symbols, preferably self-explanatory, were in general preferred to legends requiring translation;

f. innovations, i.e symbols not appearing in any national chart, were occasionally introduced when necessary;

g. the effects of new automated drafting techniques were borne in mind, but greatest weight was given to the realities of the existing approach to charting of most IHO members;

h. the layout of each group of items as shown by the Table of Contents follows the principle of working from the general to the particular.

(*) CSPCWG is a sub-group of the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS).

B-102 PURPOSE OF THE SPECIFICATIONS

The Chart Specifications of the IHO, Part 1, are intended to provide a framework for the **standardization** by member countries of all nautical charts, both in their national series and in the international (INT) series of the IHO.

B-102.1 The IHO has striven to increase **standardization** since its inception. Standardization is desirable for navigators who may need to use the charts of two or more nations, in order that transfers from chart to chart can be made without unnecessary hazard or confusion. A high level of standardization is also an essential pre-requisite for the extension of the international chart concept which has proved successful at small scales.

B-102.2 **Complete standardization** is unlikely to be achieved: the Specifications therefore attempt to distinguish between the fundamental elements of a chart, where standardization is of great importance, and those features where variation would not mislead a navigator. Paragraph 110 defines the various levels of standardization which can be identified throughout the Specifications.

B-103 SCOPE OF THE SPECIFICATIONS

B-103.1 **Scale of charts covered by the Specifications.** These Specifications apply to medium- and large-scale charts, i.e. scales larger than 1:2 000 000.

Smaller-scale charts are covered by the IHO Specifications for small-scale international (INT) charts - see **IHO Regulations for International (INT) Charts, Appendix 1.**

B-103.2 **General content of charts**. The standardization of nautical charts is a more profound matter than the adoption of a standard set of symbols and abbreviations. One prerequisite is agreement on the place of charts in the full repertory of navigational documents, on the extent to which a nautical chart is the appropriate medium for particular categories of information, for example, tidal data. As a general principle, nautical charts should show as much relevant navigational detail as can be clearly represented in graphical form.

Another essential is agreement on the definition, and real significance to chart users, of the individual features charted; for instance, the extent of the information which a chart should convey to the mariner about a fog detector light, an offshore platform, a buried gas pipe, or a Deep Water Route.

B-103.3 **Detailed content of charts**. The Specifications are intended to be as comprehensive as possible, covering every aspect of chart content and endeavouring to provide a groundwork of reasoned argument to support the recommendations made. Detailed as the Specifications are, they cannot provide a complete and automatic answer to all the questions the chart compiler may ask: nautical realities do not easily fit into a system of cartographic rules. But the introductory paragraphs in many of the separate Specifications will allow cartographers to see the underlying intention and deal with anomalous features satisfactorily.

B-150 ASSOCIATED PUBLICATIONS

A number of other publications are complementary to these Specifications. They are available from the IHB. They include:

B-151 INT 1 - SYMBOLS, ABBREVIATIONS, TERMS USED ON CHARTS

INT 1 provides the chart user with a key to symbols and abbreviations used on charts compiled in accordance with the Chart Specifications of the IHO.

B-152 INT 2 - BORDERS, GRADUATION, GRIDS AND LINEAR SCALES

INT 2 shows specimens of the various patterns of border graduation and linear scales.

B-153 INT 3 - USE OF SYMBOLS AND ABBREVIATIONS

INT 3 is a standard reference chart of a fictitious area with as many examples as possible of the use of these Specifications.

B-160 CORRECTION SYSTEM FOR THE SPECIFICATIONS

The Chart Specifications of the IHO will need to be amended from time to time in response to the developing requirements of nautical charting, including changing navigational procedures and developments in cartographic techniques. The Chart Standardization and Paper Chart Working Group (CSPCWG) (*) is responsible for the updating of the Specifications and all proposals for changes will be referred by the IHB to the CSPCWG for advice. Members of the CSPCWG, in their capacity as a standing group of experts, will also identify new points requiring standardization action for discussion by the Committee, which will give appropriate advice to the IHB. The CSPCWG will recommend amendments to the Specifications to the IHB. The IHB will communicate them to all IHO Members by Circular Letter, asking Members to make known any major objection within three months. After three months, in the absence of such objections from one or more Members, the IHB will announce, by a second Circular letter, that the amendments have come into force and that members should consequently correct their copies of the Specifications. If necessary, the proposed amendments will be modified to take account of objections or suggestions received, and an explanation will be given in the second Circular Letter, which will also promulgate the final version.

(*) CSPCWG is a sub-group of the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS).

INTRODUCTION

Applicability of these specifications. These Specifications are applicable to all small-scale international (INT) Charts, ie those with a scale of 1:2 000 000 and smaller. Members producing or printing these international charts should also consult the "Regulations of the IHO for International (INT) Charts".

This is the second edition of the "Chart Specifications of the IHO for Small-scale International (INT) charts (scales 1:2 000 000 and smaller)". It is in five sections, the contents of which are:

100 General
200 Format
300 Topography
400 Hydrography and Navigational Aids
500 Geographic Names

These Specifications have previously been issued as follows:

First Edition published in January 1970 as Annex 3 of the Final Report of the IHO Commission on the International Chart. This resulted from a draft prepared by the US Naval Oceanographic Office, 24 February 1969, which was revised at the second conference of the IHO Commission on the International Chart held in Monaco, 10-12 March 1969 and finalised at the third conference, held in London, 11-12 November 1969.

Re-issued in August 1981 as Appendix 1 to the Regulations of the IHO for International (INT) Charts - Specifications for Small-scale International Charts (scales 1:2 250 000 and smaller), published by the IHB, Monaco, and including amendments promulgated in IHB Circular Letters 14/71, 34/71, 11/72, 33/72, 1/73, 17/73, 9/75, 11/75 and 1/78.

An index for these Specifications is given at the end of Part C. The list of items is in alphabetical order.

A style sheet for small-scale international charts is included as Appendix A.

Updating of these specifications is effected by changes announced in the IHB's Circular Letters. See C-103.1 for details of procedures.

The Record of Corrections which follows should be updated when it is announced that changes are approved. See C-103.2.

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RECORD OF CORRECTIONS

Specification Number	Correction Number	Circular Letters		Remarks
		Promulgated by	Approved by	
1st edition		21/1970		1st edition promulgated as Annex 3 of the report made by the Commission on the International Chart.
1st edition (re-issue)		43/1981		Promulgated as Appendix 1 to the IHO Regulations for INT Charts.
2001 edition		18/2001		New loose-leaf edition - including editorial updating - incorporated as Part C of M-4
C-103.1	1-2003	75/2003		CSC replaced with CSPCWG

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SECTION 100 - GENERAL

C-101 SMALL-SCALE INTERNATIONAL (INT) CHARTS

C-101.1 Two schemes of international (INT) charts on scales of 1:2 000 000 and smaller have been established under the auspices of the International Hydrographic Bureau (IHB). These charts have been designed to provide complete and comprehensive small-scale coverage, usable by all nations, for the world's oceans.

C-101.2 The two schemes are outlined in C-203 and detailed in M-11, Catalogue of International Charts.

C-101.3 It is recommended that each Member State include a separate index page in their national chart catalogue showing their small-scale international charts.

C-101.4 The producer nations for international charts of the same region have an obligation to maintain close co-operation with each other in order to ensure overlap agreement between international charts in all series, and should arrange bilateral exchanges of data and, where necessary, of repromat.

C-102 SCOPE OF THE SPECIFICATIONS

C-102.1 These specifications provide basic guidance for the production of international charts at scales of 1:2 000 000 and smaller.

C-102.2 Any particulars not covered by these specifications shall be in accordance with the Specifications of the IHO for Medium- and Large-scale Charts (including INT 1, INT 2 and INT 3) at Part B of this publication, Regulations of the IHO for International (INT) Charts at Part A and IHO Technical Resolutions (TR). Appropriate cross-references are provided.

C-103 CORRECTION SYSTEM FOR THE SPECIFICATIONS

C-103.1 The Chart Specifications of the IHO will need to be amended from time to time in response to the developing requirements of nautical charting, including changing navigational procedures and developments in cartographic techniques. The Chart Standardization and Paper Chart Working Group (CSPCWG) (*) is responsible for the updating of the Specifications, and all proposals for changes are referred by the IHB to the CSPCWG for advice (see TR K2.11). If an IHO Member State finds it necessary to adopt a new specification or use a new symbol for a feature for which there is no existing symbol, the Member should advise the Bureau of the action taken at the earliest opportunity with a view to its consideration for possible incorporation in these Specifications (see TR K2.11). The procedures by which the changes are initiated, discussed and promulgated are set out in B-160.

C-103.2 The Record of Corrections, before this section, should be updated when it is announced that amendments have been approved. It is intended that this Record should also serve as a Bibliography.

(*) CSPCWG is a sub-group of the IHO Committee on Hydrographic Requirements for Information Systems (CHRIS).

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CHART SPECIFICATIONS OF THE IHO FOR SMALL-SCALE INTERNATIONAL (INT) CHARTS

ALPHABETICAL INDEX