

13th CHRIS MEETING
17-19 September 2001, Athens, Greece

REPORTS BY CHRIS WORKING GROUPS

STANDARDISATION OF NAUTICAL PUBLICATIONS WORKING GROUP
(SNPWG)

(Robert Ward, Australia)

[\(CHRIS/13/14.4A has been amended and re-issued as CHRIS/13/14.4A WP2 to reflect the decisions of CHRIS13\)](#)

Introduction

1. The report of the SNPWG to the XVIth IH Conference is submitted to CHRIS for consideration.

Discussion

2. The attached report covers the activities, achievements and recommendations of the SNPWG.

Action Required of CHRIS

3. The CHRIS is requested to:

- a. **agree** that International (INT) Nautical Publications are not an appropriate requirement [for so-called NP1 and NP2 products](#),
- b. **endorse** the proposed amendments to TR's,
- c. **agree** that the SNPWG [should now concentrate onbe-disbanded defining the data format requirements for NP3](#),
- d. **approve** revised SNPWG TOR's that reflect the NP3 requirement and the completion of other work, and
- de. **forward** ~~the attached SNPWG report to~~[invite](#) the IHB to:
 - (1) [seek](#) M/S approval of the proposed amendments to TR's,
 - (2) [invite](#) M/S to consider participation in the SNPWG and nominate appropriate representatives who are able to contribute to NP3 issues,
 - (3) [request](#) existing SNPWG members to confirm their continuing participation in the WG.

STANDARDISATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG)

1. Chairman

Commander Robert E. WARD, RAN - Australian Hydrographic Service

Vice Chairman and Secretary

Mr Randy White – NIMA (USA)

2. Membership

2.1 Argentina, Australia, Brazil, Canada, Chile, Cuba, Estonia, Finland, France, Germany, India, Italy, Japan, Korea, Poland, South Africa, Spain, UK, USA-NIMA, and USA-NOAA registered as SNPWG participants. In addition four “expert contributors” from USA, and from Italy represented various maritime and commercial industry interests.

2.2 The HO’s of Australia, Germany, Japan, USA and UK provided the greatest level of participation in the WG.

3. Meetings

3.1 After an inaugural meeting in September 1999, the WG carried out its work exclusively by correspondence using the internet. A discussion group was established on the Open Ecdis Forum site to facilitate the work.

4. Agenda Items

4.1. In response to Decision 39 of the XVth IH Conference to expand the Terms of Reference of the IHO WG on Standardization of Sailing Directions to include digital publications, the SNPWG was invited to:

- a. Review the requirements of international shipping for nautical paper and digital publications.
- b. Review existing publications intended for international shipping.
- c. Review the existing IHO technical resolutions, guidelines, specifications and standards which relate to nautical publications, initially focusing on Sailing Directions.
- d. Investigate restructuring the format and content of nautical publications in order to optimise their reproduction in digital and paper formats, and to facilitate their integration with information systems such as ECDIS. Initial focus should be given to Sailing Directions, to define:
 - 1) the minimum content of digital Sailing Directions compatible with ECDIS, and
 - 2) the minimum common content of both digital and paper Sailing Directions, as stand alone documents.
- e. Draft guidance document(s) and/or revised technical resolutions, as instructed by CHRIS.
- f. Investigate the production of specifications for International (INT) nautical publications (e.g. Sailing Directions, List of Lights and Radio Signals).

5. Achievements

5.1 The following has been achieved:

- ?? The continuing requirement for Nautical Publications (NP) was confirmed. (see Task 4.1a)
- ?? A non-exclusive list of NP's was drawn up and included in revised Technical Resolutions (TR's). (see Task 4.1b)
- ?? A comprehensive review of the existing TR's was undertaken to help improve the structure, content and format of NP's and to provide guidance for the concurrent publication of digital NP's. As a result, proposed amendments to TR's are forwarded for consideration and adoption by the XVIth IH Conference (see Tasks 4.1c, 4.1d and 4.1e). The proposed amendments are included at Annex A to this Report as a revised text with the revisions highlighted. A clean copy of the revised text is at Annex B.

6. Tasks Outstanding

6.1 Specifications for International (INT) nautical publications (see Task 4.1f), similar in concept to INT charts were not investigated. ~~The Conference may wish to review this requirement considering taking into account the fact~~ that:

- ?? A basic tenet of the IHO is the avoidance of duplication of products;
- ?? the WEND principles specifically discourage the duplication of ENC data for use in ECDIS. It follows therefore that this should also apply to official digital NP's intended for use with ECDIS and ECS; and
- ?? the fact that if certain M/S wish to reproduce NP's belonging to another M/S, then TR A.3.4 provides the mechanism through bi-lateral agreement.

The CHRIS at its 13th meeting considered these facts and agreed that International (INT) Nautical Publications are not an appropriate requirement for so-called NP1 and NP2 products. This requirement has subsequently been removed from the SNPWG Terms of Reference.

7. Future Activity

7.1 All WG members were invited to propose additional work items for consideration. No proposals were forthcoming. However, the CHRIS at its 13th meeting considered that the SNPWG should now concentrate on defining the data format requirements for NP3. New Terms of Reference for the SNPWG were drawn up to reflect this. The new TOR's are at Annex C. Accordingly, it appears that the work of the SNPWG may be considered as complete for the time being.

~~8. Recommendations~~

~~8.1 The XVIth Conference is requested to:~~

- ~~a. agree that International (INT) Nautical Publications are not an appropriate requirement;~~
- ~~b. adopt the proposed amendments to TR's, and~~
- ~~c. agree that the SNPWG be disbanded.~~

ANNEX A TO THE REPORT OF THE SNPWG

PROPOSED AMENDMENTS TO TECHNICAL RESOLUTIONS CONCERNING NAUTICAL PUBLICATIONS

(AMENDMENTS **HIGHLIGHTED**)

CHAPTER A – SUBJECTS OF GENERAL APPLICATION

SECTION 2 – NAUTICAL DOCUMENTS PUBLICATIONS

A.2.11 CORRECTION UPDATING OF NAVIGATIONAL HANDBOOKS NAUTICAL PUBLICATIONS

- 1.- It is recommended that in each basic nautical publication the rules concerning its ~~correction updating~~ should be inserted.
- 2.- It is recommended that ~~the~~ Hydrographic Offices apply such a system for keeping up to date ~~navigational handbooks nautical publications so~~ as to simplify and speed up the task of navigators in charge of carrying out ~~corrections updating~~, as well as to ensure the full accuracy and clearness of all ~~corrections updates~~.
- 3.- It is also recommended that the system of writing and erasing ~~corrections updates by hand~~ be avoided as much as possible.

A.2.13 LIST OF NAUTICAL PUBLICATIONS

1. It is resolved that nautical publications shall include, but not necessarily be limited to the following publications:

Distance Tables
List of Buoys and Beacons
List of Lights
List of Radio Signals
List of Symbols, Abbreviations and Terms used on Charts
Mariners' Handbooks
Notices to Mariners
Routeing Guides
Sailing Directions
Tidal Stream Atlases
Tide Tables

A.2.14 PRINTED AND DIGITAL NAUTICAL PUBLICATIONS

1. It is resolved that the information provided in nautical publications may be published both as a printed publication and in digital form. When nautical publications are published in digital form, it is recommended that a printed publication shall also be produced. Digital nautical publications need not be facsimiles or replicas of the printed versions or vice versa.; nevertheless, both the printed and digital publications shall provide consistent and non- conflicting information.

A.2.15 NAUTICAL PUBLICATIONS AND THE SOLAS CONVENTION

1. It is resolved that nautical publications produced in compliance with these Technical Resolutions and Recommendations shall be deemed to satisfy the relevant carriage requirements for nautical charts and nautical publications in accordance with the UN Safety of Life at Sea (SOLAS) Convention Chapter V.

CHAPTER A - SUBJECTS OF GENERAL APPLICATION

SECTION 7 – DIGITAL NAUTICAL PUBLICATIONS

A.7.1 CONTENT AND GENERAL ARRANGEMENT

1. Digital Nautical Publications may be produced in two arrangements, firstly as a stand-alone product based on existing paper publications, and secondly in the form of a compiled database intended primarily to work within an ECDIS.

2. For the sake of clarity, Nautical Publications shall be defined by the following:

a) NP1 – Printed paper publications

b) NP2 – Digital publications based upon existing paper publications

c) NP3 – Digital dataset(s) fully compatible with ECDIS that serve the purpose otherwise provided by NP1 or NP2.

Note: Standards-Data Specifications for NP3 are under development have yet to be finalised and therefore are not specifically referred to in this document

3. It is resolved that Digital Nautical Publications (NP2 and NP3) shall at least fulfil the functions of corresponding printed nautical publications (NP1).

4. Digital Nautical Publications (NP2 and NP3) need not slavishly follow the requirements of presentation and organisation laid down for printed publications (NP1). However, the relevant resolutions and recommendations for printed publications (NP1) shall serve as guidance regarding content and purpose.

See also A.2.14, A.7.2, A.7.3, A.7.4, Chapters C, D, E, F, G, H.

A.7.2 DATA FORMATS

1. It is strongly recommended that NP2 digital nautical publications that are based directly on existing printed nautical publications (in other words, digital facsimiles, re-compilations, or others) utilise open-systems or widely accessible digital publishing techniques and formats. This provides HO's with maximum flexibility in how they undertake digital publication but at the same time ensures compatibility and ease of integration with the widest range of computer based applications likely to be used to access the information.

A.7.3 PRESENTATION OF INFORMATION

1. For digital nautical publications, it is not recommended or required that the presentation of information is standardised as to order or geographical sequence other than to be in agreement with any indexes devised to direct the user to the relevant parts of a digital publication. It is however, recommended that information presented in a digital nautical publication conforms to the relevant IHO textual presentation and symbology standards.

A.7.4 CROSS-REFERENCING OF INFORMATION

1.- It is recommended that insofar as is possible an auto cross-referencing system shall be incorporated to connect all related / relevant material in a digital nautical publication.

2. It is recommended that digital nautical publications make the fullest use of such things as search engines, web-based browsers, hypertext links and keywords.

3. It is recommended that the cross-referencing system be suitable to provide links to associate information in a digital nautical publication with information in ENC's (and RNC's where possible) and with visual index diagrams.

4. It is recommended that insofar as is possible:

- a) links shall be available to associate sketch plans, aerial oblique photographs or other illustrations and photographs with the relevant digital nautical publications text and with the relevant parts of ENC's (and RNC's where possible).
- b) digital nautical publications providing meteorological information shall contain a linked meteorological database capable of supporting modelling solutions.
- c) digital nautical publications providing oceanographic information should contain a linked oceanographic database capable of supporting modelling solutions.
- d) digital nautical publications providing density and salinity of water information should contain a linked seawater profile database providing modelling solutions.

A.7.5 UPDATING

1.- It is recommended that a regular system of updating for digital nautical publications be maintained using an appropriate combination of:

- a) Digital Notices to Mariners
- b) Cumulative updating files
- c) Replacement files

See also A2.11 A2.12

A.7.6 DATA SECURITY

It is recommended that digital nautical publications incorporate data authentication processes to ensure that information contained in digital nautical publications can be verified by consumers before use.

CHAPTER C - SAILING DIRECTIONS

SECTION 1 – GENERAL

C 1.1 TYPE TO BE USED FOR GEOGRAPHICAL NAMES

1.- It is resolved that geographical names shall, as far as possible, be **distinguished emphasised** in Sailing Directions by the type and size of the print. ~~The country which issues the original Directions will thus itself indicate what should and what should not be translated.~~

See also A4.1

C 1.2 TRANSLITERATION IN ROMAN CHARACTERS OF GEOGRAPHICAL NAMES

1.- It is recommended, with a view to facilitating as far as possible the transcription of geographical names, that those countries which do not use Roman characters insert, in the alphabetical indexes of their Sailing Directions, a transliteration in Roman characters of those geographical names which refer to their own coasts.

- a) The transliteration should be made in accordance with the official system of the country concerned. A brief description of the system used should be given.

See also B2.15, C1.3

C 1.3 ALPHABETICAL INDEXES OF GEOGRAPHICAL NAMES

1.- It is recommended that all countries include alphabetical indexes of geographical names in their Sailing Directions.

- a) These names should be written according to the official orthography.

Note: For those countries which use a non-Roman alphabet see C1.2.

C 1.4 USE OF INFORMATION PUBLISHED BY OTHER COUNTRIES

1.- It is recommended that, when compiling Sailing Directions which include information concerning foreign coasts, Hydrographic Offices ~~shall wherever possible, and under appropriate bilateral arrangements~~ use the Sailing Directions of the country which is being described ~~or those of its administrating authority.~~ This may be supplemented by information from any authoritative source that is not constrained by copyright, including data from the internet if such are available.

2.- It is recommended that, in the case of information **taken derived** from foreign publications, the title and date of issue of such publications should be clearly stated **in the preface (or its equivalent in digital publications) in the preface.**

See also A3.4

C 1.6 TRANSLATION OF SAILING DIRECTIONS WRITTEN IN NON-ROMAN CHARACTERS

1.- It is recommended that the translation of a volume be undertaken when two or more Member States contract in advance for a copy, the cost of each copy being determined by dividing the cost of translation by the number of copies sold. It is further recommended that Member States undertake to produce an English language version to enable prompt dissemination of information. (English remains the internationally agreed language for air and maritime communications).

C 1.8 ADVANCE NOTIFICATION OF THE PUBLICATION OF SAILING DIRECTIONS

1.- It is ~~resolved~~ recommended that, when any Hydrographic Office decides on the issue of a new volume of Sailing Directions or a supplement, it shall:

- a) Publish advance notification in its Notices to Mariners.
- b) Publish details on the Internet whenever possible.
- c) Communicate essential details concerning the future publication to the IHB which will insert such information in the I.H. Bulletin.

C 1.9 CORRECTION UPDATING OF SAILING DIRECTIONS

1.- It is strongly recommended that a regular system of correction updating be maintained using only one of the following three systems:

- a.i) The issue periodically of supplementary statements containing information and corrections revisions necessary for the amendment updating of the Directions, such supplements to be cumulative and arranged in the same geographical sequence as the volumes affected, the latest supplement in all cases cancelling all earlier ones.
- a.ii) In any supplement issued, new or altered material should be clearly indicated by some form of readily perceived identification, preferably side-lining.
- b) Revised editions up-dated by automated means.
- c) Change pages for loose-leaf books.

2.- It is recommended that the interval between successive supplements/revised editions/change pages should not normally exceed ~~two~~ three years and need not be more frequent than 12 months.

3.- It is recommended that Notices to Mariners be used for urgent corrections updates, but these should be incorporated into the next supplement/revised edition/change pages and should be regarded as a separate system of correction updating for important matters only between supplements/revised editions/issues of change pages.

See also A2.11, A2.12

CHAPTER C - SAILING DIRECTIONS

SECTION 2 – ARRANGEMENT

C 2.1 GEOGRAPHICAL ARRANGEMENT AND DIVISION INTO VOLUMES

1.- It is resolved that nations publishing non-original Sailing Directions shall indicate in the preface of every volume the title and the geographical limits of the original source Sailing Directions ~~which~~ referred to in the volumes or ~~to~~ in some of ~~the~~ its chapters.

See also C1.4

2.- It is recommended that, insofar as possible, the divisions of the volumes and of the chapters be in agreement with the index showing the arrangement ~~of original in the source~~ Sailing Directions.

3.- It is recommended that the order adopted for the description of coasts be that of the original source Sailing Directions, and that in intricate waters a sketch index shows, by means of arrows, with numbers of paragraph or pages as far as is necessary, the sequence followed in the description.

4.- It is resolved that the limits of oceans and seas described in IHO ~~special publication~~ Special Publication S-23 shall be adopted, as far as possible, for the titles of volumes, chapters and paragraphs of Sailing Directions and Lists of Lights.

See also K3.2

C 2.2 GENERAL ARRANGEMENT AND DIVISION OF SAILING DIRECTIONS MATERIAL INFORMATION IN EACH VOLUME

1.- It is recommended that the following paragraphs be used as a general guide for the arrangement of the contents of Sailing Directions.

a) The general arrangement of a volume should be as follows:

- i) Preliminary pages. See para c below.
- ii) General navigation and regulations. See para d below.
- iii) Environmental conditions. See para e below.
- iv) Offshore and through-routeing information. See para f below.
- v) Coastal routes and geographical areas. See para g below.
- vi) Appendices for detailed regulations etc. See para h below.
- vii) Illustrations. See para i below.
- viii) Alphabetical index. See para ~~i~~ j below.

b) Separate volume for general information:

When several volumes of Sailing Directions cover a major sea area, or a landlocked sea, it may be more expedient for some of the general information (see a(ii) above), the environmental information (see a(iii) above) and the through-routeing to form a separate volume covering the whole of the major sea area.

c) Preliminary pages comprising:

- i) Title page showing date of issue, latest Notice to Mariners used, short statement on method of correction. Preface with bibliography of source material (*see C1.4 and C2.1*).
- ii) List of contents and diagrams, etc.
- iii) Explanatory Notes on terms and conventions used.
- iv) List of abbreviations used.
- v) Glossary of foreign and special words found on charts and in the text. A transliteration alphabet and/or notes on the system used when this is necessary.
- vi) Index chartlet (*see C2.4*).

d) First chapter or section should contain the following information:

Charts and charting. Remarks on the general quality of the charts ([paper and digital](#)) available for the area, use of charts other than those of own nationality; remarks on important differences of geographical or tidal datum between charts.

Buoys and beacons. Descriptions of systems in use if differing from IALA Regions A or B.

Navigation. General remarks on navigation in coral waters; notes on the existence of large amounts of kelp; ice navigation and ice-breaker service available where these are applicable to the area; any other notes applicable to navigation throughout the area covered by the book, such as fishing and other maritime activities.

Regulations. Extracts of national regulations concerning navigation, pollution, quarantine, cables, pipelines and any other special regulations that should be known to mariners before arrival in national waters. The territorial sea and economic zones claimed should be given in general terms.

Radio services. General remarks on the availability and reliability of radio position fixing systems, radio beacons, navigational warnings, [and](#) weather forecasts. This section should not duplicate the details of times of operation and the frequencies if these are given in separate radio publications.

Pilotage. General remarks on pilotage services in the areas, national regulations regarding pilotage. Where there are standard regulations for pilots applicable to all parts of the area, these can be given to avoid repetition elsewhere in the book. Special regulations applicable only to individual ports are best given at the port concerned rather than in the first chapter.

Visual signals. Systems of signals in use in the area for storm, weather, dredging, traffic and other special maritime activities should be described. These should not include well-known international signals; special signals only applicable to an individual port are best given with the main description of the port.

Distress and rescue. Brief description of the sea/air rescue organisations that may be in operation for the area covered by the book.

Countries. Brief information about the countries in the area of interest to the mariner.

Principal ports and anchorages. A list of ports and anchorages in the area giving position, principal purpose, brief statement on limiting conditions such as depth of water, or size of vessel that can use the port, whether it is a port of entry, cross-reference to other parts of the book or other publications where further information can be obtained.

Port services. A list of places should be given where fuel, fresh water, repairs, docking, fumigation, [and](#) diplomatic representatives are available.

e) Second chapter or section should contain:

Environmental conditions. General information concerning bottom topography, if relevant, seismic activity, currents, tidal streams, oceanography, ice conditions with diagrams, sea and swell, surface meteorological information with seasonal diagrams and climatic tables for selected places on the coast.

See also C3.12, C3.13

f) Third chapter or section should deal with the following:

Through routes and traffic separation

Landfall aids and landmarks

Offshore activities and hazards affecting navigation offshore and for passing through the area.

In complex geographical areas it may be necessary to have other local through-routeing chapters or sections.

See also C2.7

g) Subsequent chapters or sections. After the main through-route chapter, the book should be subdivided into chapters or sections as necessary using the "waterway" principle (see below).

The contents of chapters or sections should be determined by the needs of navigation to form logical geographical units.

See also C2.8(a).

The "waterway" principle means that it is the channel or coastal route that is being described and not the coast. For example:

Straits of Gibraltar - Through route
Straits of Gibraltar - North side
Straits of Gibraltar - South side

rather than

Spain - South coast
Morocco - North coast

A large island having a passage either side of it should not be described as a whole, but in the form of a passage along one side and then a passage along the other side.

h) Appendices. These may be inserted after the main text and should be used to contain lengthy regulations, or extensive lists of restricted areas, coastal distance tables and other matter that might be inconvenient with the main text.

i) Illustrations should whenever possible be included within the text.

See also C3.20

j) Index. A comprehensive index (primarily of place names) should be included. (*see also C1.3*). The index may also contain latitudes and longitudes as well as paragraph or page references for the text.

C 2.3 STANDARDIZATION OF SAILING DIRECTIONS

1.- It is recommended to standardize as far as is reasonable, the general structure and arrangement of books of Sailing Directions published by Member States, but not to the extent of constraining all thought and innovation for improvement.

C2.4 INDEX CHARTS IN SAILING DIRECTIONS

1.- It is strongly recommended that each country publish an index chart showing that portion of the world covered by its volumes of Sailing Directions.

2.- It is strongly recommended that each volume contain an index chart or charts showing the following:

- Coastal outline and border with latitude and longitude graduation.
- Limits of area covered by the volume.
- Title and number of the adjacent volumes.
- Limits and numbers of the charts for the area.
- Names of principal ports, bays, channels sea areas, headlands, islands and countries, as far as this is consistent with clarity.
- Limits of chapters or sections to show the area covered and the direction in which the text proceeds.

See also C2.1, C2.2(c).

~~C 2.5 HEADINGS OF PAGES~~

~~1.— It is resolved that the name of areas under consideration shall be clearly shown on the top of each page of Sailing Directions (e.g. Nova Scotia—Bay of Fundy).~~

C 2.6 INDICATION OF GEOGRAPHICAL POSITIONS

~~1.- It is resolved that an approximate geographical positions (latitude and longitude to 2 minute, or 2 0.1 minute when considered necessary) should be quoted as precisely as possible to enhance the utility of positional information when used in electronic systems for selected features be given fairly frequently in the text so as to aid rapid location on charts.~~

C 2.7 INSTRUCTIONS FOR THROUGH TRAFFIC IN DIFFICULT WATERS

1.- It is recommended that general information on through routes, reporting points, traffic separation schemes, the general track followed by shipping, should be described if known. In some areas there may be very little to describe, in others the recommended through-routes may be complex and it may be necessary to have a separate chapter.

See also C2.2(b).

2.- It is recommended that when a channel is referred to in several parts of the same volume, the complete instructions for this channel be given in a separate chapter, or that such instructions be linked by adequate page references.

3.- It is recommended that general information on the following subjects that affect ships passing through the area should be given; e.g. mine areas, prohibited areas, for example, exercise areas, fishing, exploration and exploitation of the sea bed seabed, and ice breaking ice-breaking services etc.

See also C2.2, C3.16

C 2.8 ARRANGEMENT OF INFORMATION

1.- It is recommended that in printed publications the information in chapters or sections be arranged as follows: The style may be in the form of a notebook with bullet point side headings containing single sentence statements. Information that properly rests in another publication shall be omitted or reference only made to that publication.

a) Waterways and coast

Chapters or sections should begin with introductory paragraphs dealing with general information applicable to the whole area of the chapter or section, such as see below:

General aspect and remarks about the waterway and shores.

~~Radar characteristics of the coast (C3.18).~~

Water level peculiarities and irregularities (C3.11).

Currents and tidal streams.

~~Sea bed peculiarities.~~

Local meteorological conditions.

Local ice conditions.

Fishing activity.

Offshore or coastal activities dangerous to shipping such as drilling platforms, military exercises, dumping grounds.

Magnetic anomalies.

Regulations.

Pilotage.

Submarine cables and pipelines of a general nature (C3.10).

After the introductory paragraphs, each significant portion of the waterway or coastal route should contain the following information of a more local nature:

Route - general description.
Controlling depth or least charted depth in the fairway.
Regulations for traffic separation, movement reporting, prohibited areas (C3.16).
Local pilotage.
Currents, tidal streams, overfalls.
Local winds and fogs, etc.
Principal marks and navigation aids (C3.17).
Directions for the waterway or coastal passage.
Directions for approaches to harbours and anchorages.
Anchorages and harbours.
Minor side channels for small craft (less than 2m draught, or 12m in length).
Small craft anchorages, harbours and marinas not falling within larger harbours.

b) Port information

Name and position of port or harbour.
Limits of port.
General remarks on type of port, main function, [and](#) amount of traffic handled.
Port authority.
Limiting conditions due to draught, size of vessel (C3.3, C3.4).
Water level and mean tidal range.
Density or salinity of water if differing from normal seawater (C3.14).
Ice.
Local meteorological conditions.
Arrival information required and notice for ETA.
Port information service, signal stations.
Pilotage and tugs.
Regulations.
Outer anchorages and sea berths.
Tidal streams.
Entrance channel or fairway.
Traffic signals.
Directions for entering.
Berths, basins and depths of water. } (see C3.4).
Port facilities in brief for cargo handling, ro-ro, containers, lighters, cranes, etc.
Repair facilities, dry docking, [and](#) slipways.
Supplies of fuel, water, etc.
Transport facilities from the port by sea, road, rail, canal and nearest main airport.

CHAPTER C - SAILING DIRECTIONS

SECTION 3 – CONTENT

C 3.3 DIMENSIONS OF SHIPS ADMITTED INTO HARBOURS

1.- It is strongly recommended that the maximum dimensions of ships normally admitted into harbours, as fixed by the harbour authorities, be given in Sailing Directions.

C 3.4 DATE OF CERTAIN ESSENTIAL INFORMATION

1.- It is recommended that critical types of information contained in Sailing Directions, such as instructions for entering harbours, depths of water, channels, etc., be followed by the date, in brackets, when the data were last checked.

C 3.5 UNVERIFIED INFORMATION

1.- It is recommended that ~~unverified unconfirmed~~ items of information ~~should not appear~~ in the Sailing Directions ~~and not based on accurate surveys or verified sources be so indicated~~ unless there is a potential hazard.

C 3.6 DREDGED CHANNELS OR AREAS

1.- It is resolved that the following information concerning dredged channels or areas shall be inserted in Sailing Directions only when it is not shown on the chart:

- i) Depth to which the channel or area has been dredged.
- ii) Year of the last dredging.
- ~~iii) Indication as to whether dredging is maintained or not.~~

C 3.7 SWEPT AREAS

1.- It is recommended that for areas where the nature of the bottom is such that depths tend to vary and the changes have practical significance to surface navigation, the latest date on which they were swept be indicated in Sailing Directions, but only when it is not shown on the chart.

C 3.8 CLEARANCES UNDER BRIDGES AND AERIAL CABLES

1.- It is resolved that minimum vertical clearance shall always be given in Sailing Directions in respect of bridges, viaducts, overhead transporters, aerial cable-ways, power transmission cables and telegraphic and telephonic cables crossing navigable waters: even when this information is shown on the chart.

2.- It is recommended that, in the case of overhead transporters and aerial cable-ways, the clearance of the bridge or the cable itself, as well as that of the cars when in motion, be indicated: even when this information is shown on the chart.

3.- It is resolved that the navigable width shall always be given for bridges and viaducts crossing navigable waters.

~~C 3.9 POPULATION OF TOWNS~~

~~1.— It is recommended that when the population of a town is stated, the year date of the census be also given, if known. If the figures mentioned are derived only from an estimate, it shall be so stated.~~

~~Note: The purpose of this information is only to provide a convenient way of indicating the size and importance of the place.~~

C 3.10 SUBMARINE CABLES

1.- It is recommended that general information supplied to mariners by Hydrographic Offices either in Sailing Directions or in other documents include a note which specifies:

- i) that very high voltages are carried in modern multi-channel telegraphic and telephonic cables;
- ii) that consequently it is most dangerous to attempt to free an anchor or trawl by hauling in the cable; the anchor or trawl should be buoyed and cast off.

C 3.11 TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS

1.- It is recommended ~~not to insert that~~ in Sailing Directions information regarding tides already given on charts and in Tide Tables ~~should not be included. However,~~ peculiarities and irregularities, ~~however, being~~ should be fully described.

2.- It is recommended that information be given showing, for the year, seasons or months at a certain place or area, adequate data concerning the deviations of water level, in relation to chart datum, resulting from meteorological and other random or seasonal influences.

- a) This information may have to be mentioned in three ways, namely:
 - i) General information for the area in the first chapter (*see C2.2*).
 - ii) Coastal information where it occurs geographically in the text (*see C2.8*).
 - iii) For a specific port (*see C2.8*).

3.- It is recommended that when the above information appears in Sailing Directions a reference to this effect be inserted on the charts concerned.

See also A2.9.

C 3.12 METEOROLOGICAL INFORMATION

1.- It is recommended that a chapter at the beginning of each volume of Sailing Directions give all general meteorological and ice information concerning the region covered by the volume.

- a) Local meteorological and ice information (e.g. prevailing winds in a port) could also be added in the chapters or sections.

See also C2.2(5).

C 3.13 OCEANOGRAPHIC INFORMATION

1.- It is recommended that the introductory part of Sailing Directions includes oceanographic information concerning general currents and a brief account of the main characteristics (temperature, salinity, density) of surface water.

2.- It is recommended that a reference be made to the relevant oceanographic and tidal atlases, whenever possible.

See also C2.2(e).

C 3.14 DENSITY AND SALINITY OF WATER

1.- It is recommended that, when available, the density and/or the salinity of the water at ports of the world be inserted in Sailing Directions.

See also C2.8(b)

C 3.16 RECOMMENDED TRAFFIC SEPARATION SCHEMES IN CONGESTED AREAS

1.- It is strongly recommended that details of traffic separation schemes should always be given in Sailing Directions.

See also C2.7, C2.8, A1.17

C 3.17 LANDFALL DESCRIPTIONS

1.- It is recommended that landfalls be described before giving a detailed description of the coast for the use of a navigator sailing along it.

2.- It is recommended that, for a landfall from offshore, the description be given in the order in which features become visible to the navigator approaching from the most usual direction. The description will give, first, offshore islands, then mountains, then visible landmarks, etc. Then at the end of the section will be given all information known about ports and anchorages, unless this appears as part of the usual description of the coast, in which case an appropriate reference will be inserted.

3.- It is recommended that, in the case of arrival at an estuary, a description (lateral marks, beaconage, alignments, etc.) of the entire length of the various channels, one after the other, in decreasing order of importance, be given, followed possibly by a description of the banks and dangers situated between these entrance channels, as well as of landmarks of secondary importance.

See also C2.8

~~C 3.18 RADAR INFORMATION IN SAILING DIRECTIONS~~

~~1. — It is recommended that Sailing Directions include all available information concerning single structures (tower, church steeple, etc.) and geographical and coastal features (mountains, cliffs, built-up areas, etc.) which permit the fixing of a ship's position by means of radar.~~

~~2. — It is further recommended that any structures and features giving radar returns liable to be misinterpreted be specifically indicated in Sailing Directions.~~

C 3.19 EXTENT OF INFORMATION

1.- It is strongly recommended that:

- a) Books Nautical publications should only contain such information as is useful for mariners.
- b) Information should be presented clearly and distinctly so as to facilitate scanning of the page publication and to avoid time-consuming reading of extensive text.
- c) Information given in other nautical documents should not be repeated except as necessary to give a clear description.

- d) It is not the function of the Sailing Directions to give a written description of the chart.

Information should be selected on the following basis:

~~Explain~~ The general layout of the passage or channel routeing and regulations, pilotage, environmental conditions, etc.

Features ~~which that~~ are useful navigationally as landmarks or seamarks.

Features ~~that are~~ applicable to navigation ~~which that~~ may be used as leads, ~~or~~ have to be avoided, ~~or~~ passed or otherwise are relevant to vessels likely to use the waterway.

Features relevant to anchorages and berths.

- e) Those features that are selected for mention in Sailing Directions should be described as follows: If full details can be seen on the charts, then the feature ~~should only need not~~ be mentioned ~~briefly so that it can be identified on the chart unless visual identification is problematic~~.

If there is more information than is shown on the charts ~~and the absence of such additional information is potentially dangerous navigationally~~, then this should be given in the text of the Sailing Directions.

C 3.20 ILLUSTRATIONS AND SKETCHES IN SAILING DIRECTIONS

1.- It is recommended that sketch plans, aerial oblique photographs or other illustrations and photographs be used where possible to improve the descriptions given in the text. Sketch plans should not duplicate that which can be clearly appreciated from the charts.

C 3.21 LAWS AND REGULATIONS

1.- It is recommended that Sailing Directions include the important portions of laws and regulations appertaining to navigation which should be known by mariners before arrival at an anchorage or port.

- a) In many cases it will suffice to paraphrase the important portions, but if the regulations are complex then the full (translated) text may need to be given in addition as an Appendix.

ANNEX B TO THE REPORT OF THE SNPWG

**PROPOSED AMENDMENTS TO TECHNICAL RESOLUTIONS CONCERNING
NAUTICAL PUBLICATIONS**

(CLEAN COPY)

CHAPTER A – SUBJECTS OF GENERAL APPLICATION

SECTION 2 – NAUTICAL PUBLICATIONS

A.2.11 UPDATING OF NAUTICAL PUBLICATIONS

- 1.- It is recommended that in each basic nautical publication the rules concerning its updating should be inserted.
- 2.- It is recommended that Hydrographic Offices apply such a system for keeping up to date nautical publications so as to simplify and speed up the task of navigators in charge of carrying out updating, as well as to ensure the full accuracy and clearness of all updates.
- 3.- It is also recommended that the system of writing and erasing updates by hand be avoided as much as possible.

A.2.13 LIST OF NAUTICAL PUBLICATIONS

1. It is resolved that nautical publications shall include, but not necessarily be limited to the following publications:

- Distance Tables
- List of Buoys and Beacons
- List of Lights
- List of Radio Signals
- List of Symbols, Abbreviations and Terms used on Charts
- Mariners' Handbooks
- Notices to Mariners
- Routeing Guides
- Sailing Directions
- Tidal Stream Atlases
- Tide Tables

A.2.14 PRINTED AND DIGITAL NAUTICAL PUBLICATIONS

1. It is resolved that the information provided in nautical publications may be published both as a printed publication and in digital form. When nautical publications are published in digital form, it is recommended that a printed publication shall also be produced. Digital nautical publications need not be facsimiles or replicas of the printed versions or vice versa; nevertheless, both the printed and digital publications shall provide consistent and non-conflicting information.

A.2.15 NAUTICAL PUBLICATIONS AND THE SOLAS CONVENTION

1. It is resolved that nautical publications produced in compliance with these Technical Resolutions and Recommendations shall be deemed to satisfy the relevant carriage requirements for nautical charts and nautical publications in accordance with the UN Safety of Life at Sea (SOLAS) Convention Chapter V.

CHAPTER A - SUBJECTS OF GENERAL APPLICATION

SECTION 7 – DIGITAL NAUTICAL PUBLICATIONS

A.7.1 CONTENT AND GENERAL ARRANGEMENT

1. Digital Nautical Publications may be produced in two arrangements, firstly as a stand-alone product based on existing paper publications, and secondly in the form of a compiled database intended primarily to work within an ECDIS.
2. For the sake of clarity, Nautical Publications shall be defined by the following:
 - a) NP1 – Printed paper publications
 - b) NP2 – Digital publications based upon existing paper publications
 - c) NP3 – Digital dataset(s) fully compatible with ECDIS that serve the purpose otherwise provided by NP1 or NP2.

Note: Standards for NP3 are under development and therefore are not specifically referred to in this document.

3. It is resolved that Digital Nautical Publications (NP2 and NP3) shall at least fulfil the functions of corresponding printed nautical publications (NP1).
4. Digital Nautical Publications (NP2 and NP3) need not slavishly follow the requirements of presentation and organisation laid down for printed publications (NP1). However, the relevant resolutions and recommendations for printed publications (NP1) shall serve as guidance regarding content and purpose.

See also A.2.14, A.7.2, A.7.3, A.7.4, Chapters C, D, E, F, G, H.

A.7.2 DATA FORMATS

1. It is strongly recommended that NP2 digital nautical publications that are based directly on existing printed nautical publications (in other words, digital facsimiles, re-compilations, or others) utilise open-systems or widely accessible digital publishing techniques and formats. This provides HO's with maximum flexibility in how they undertake digital publication but at the same time ensures compatibility and ease of integration with the widest range of computer based applications likely to be used to access the information.

A.7.3 PRESENTATION OF INFORMATION

1. For digital nautical publications, it is not recommended or required that the presentation of information is standardised as to order or geographical sequence other than to be in agreement with any indexes devised to direct the user to the relevant parts of a digital publication. It is however, recommended that information presented in a digital nautical publication conforms to the relevant IHO textual presentation and symbology standards.

A.7.4 **CROSS-REFERENCING OF INFORMATION**

- 1.- It is recommended that insofar as is possible an auto cross-referencing system shall be incorporated to connect all related / relevant material in a digital nautical publication.
2. It is recommended that digital nautical publications make the fullest use of such things as search engines, web-based browsers, hypertext links and keywords.
3. It is recommended that the cross-referencing system be suitable to provide links to associate information in a digital nautical publication with information in ENC's (and RNC's where possible) and with visual index diagrams.
4. It is recommended that insofar as is possible:
 - a) links shall be available to associate sketch plans, aerial oblique photographs or other illustrations and photographs with the relevant digital nautical publications text and with the relevant parts of ENC's (and RNC's where possible).
 - b) digital nautical publications providing meteorological information shall contain a linked meteorological database capable of supporting modelling solutions.
 - c) digital nautical publications providing oceanographic information should contain a linked oceanographic database capable of supporting modelling solutions.
 - d) digital nautical publications providing density and salinity of water information should contain a linked seawater profile database providing modelling solutions.

A.7.5 **UPDATING**

- 1.- It is recommended that a regular system of updating for digital nautical publications be maintained using an appropriate combination of:
 - a) Digital Notices to Mariners
 - b) Cumulative updating files
 - c) Replacement files

See also A2.11 A2.12

A.7.6 **DATA SECURITY**

It is recommended that digital nautical publications incorporate data authentication processes to ensure that information contained in digital nautical publications can be verified by consumers before use.

CHAPTER C - SAILING DIRECTIONS

SECTION 1 - GENERAL

C 1.1 TYPE TO BE USED FOR GEOGRAPHICAL NAMES

1.- It is resolved that geographical names shall, as far as possible, be emphasised in Sailing Directions by the type and size of the print.

See also A4.1

C 1.2 TRANSLITERATION IN ROMAN CHARACTERS OF GEOGRAPHICAL NAMES

1.- It is recommended, with a view to facilitating as far as possible the transcription of geographical names, that those countries which do not use Roman characters insert, in the alphabetical indexes of their Sailing Directions, a transliteration in Roman characters of those geographical names which refer to their own coasts.

a) The transliteration should be made in accordance with the official system of the country concerned. A brief description of the system used should be given.

See also B2.15, C1.3

C 1.3 ALPHABETICAL INDEXES OF GEOGRAPHICAL NAMES

1.- It is recommended that all countries include alphabetical indexes of geographical names in their Sailing Directions.

a) These names should be written according to the official orthography.

Note: For those countries which use a non-Roman alphabet see C1.2.

C 1.4 USE OF INFORMATION PUBLISHED BY OTHER COUNTRIES

1.- It is recommended that, when compiling Sailing Directions which include information concerning foreign coasts, Hydrographic Offices shall wherever possible, and under appropriate bilateral arrangements use the Sailing Directions of the country which is being described. This may be supplemented by information from any authoritative source that is not constrained by copyright, including data from the internet.

2.- It is recommended that, in the case of information derived from foreign publications, the title and date of issue of such publications should be clearly stated in the preface (or its equivalent in digital publications).

See also A3.4

C 1.6 TRANSLATION OF SAILING DIRECTIONS WRITTEN IN NON-ROMAN CHARACTERS

1.- It is recommended that the translation of a volume be undertaken when two or more Member States contract in advance for a copy, the cost of each copy being determined by dividing the cost of translation by the

number of copies sold. It is further recommended that Member States undertake to produce an English language version to enable prompt dissemination of information. (English remains the internationally agreed language for air and maritime communications).

C 1.8 ADVANCE NOTIFICATION OF THE PUBLICATION OF SAILING DIRECTIONS

1.- It is recommended that, when any Hydrographic Office decides on the issue of a new volume of Sailing Directions or a supplement, it shall:

- a) Publish advance notification in its Notices to Mariners.
- b) Publish details on the Internet whenever possible.
- c) Communicate essential details concerning the future publication to the IHB which will insert such information in the I.H. Bulletin.

C 1.9 UPDATING OF SAILING DIRECTIONS

1.- It is strongly recommended that a regular system of updating be maintained using only one of the following three systems:

- a.i) The issue periodically of supplementary statements containing information and revisions necessary for the updating of the Directions, such supplements to be cumulative and arranged in the same geographical sequence as the volumes affected, the latest supplement in all cases cancelling all earlier ones.
- a.ii) In any supplement issued, new or altered material should be clearly indicated by some form of readily perceived identification, preferably side-lining.
- b) Revised editions up-dated by automated means.
- c) Change pages for loose-leaf books.

2.- It is recommended that the interval between successive supplements/revised editions/change pages should not normally exceed three years and need not be more frequent than 12 months.

3.- It is recommended that Notices to Mariners be used for urgent updates, but these should be incorporated into the next supplement/revised edition/change pages and should be regarded as a separate system of updating for important matters only between supplements/revised editions/issues of change pages.

See also A2.11, A2.12

CHAPTER C - SAILING DIRECTIONS

SECTION 2 - ARRANGEMENT

C 2.1 GEOGRAPHICAL ARRANGEMENT AND DIVISION INTO VOLUMES

1.- It is resolved that nations publishing non-original Sailing Directions shall indicate in the preface of every volume the title and the geographical limits of the source Sailing Directions referred to in the volume or in some of its chapters.

See also C1.4

2.- It is recommended that, insofar as possible, the divisions of the volumes and of the chapters be in agreement with the index showing the arrangement in the source Sailing Directions.

3.- It is recommended that the order adopted for the description of coasts be that of the source Sailing Directions, and that in intricate waters a sketch index shows, by means of arrows, with numbers of paragraph or pages as far as is necessary, the sequence followed in the description.

4.- It is resolved that the limits of oceans and seas described in IHO Special Publication S-23 shall be adopted, as far as possible, for the titles of volumes, chapters and paragraphs of Sailing Directions and Lists of Lights.

See also K3.2

C 2.2 GENERAL ARRANGEMENT AND DIVISION OF SAILING DIRECTIONS INFORMATION

1.- It is recommended that the following paragraphs be used as a general guide for the arrangement of the contents of Sailing Directions.

a) The general arrangement of a volume should be as follows:

- i) Preliminary pages. See para c below.
- ii) General navigation and regulations. See para d below.
- iii) Environmental conditions. See para e below.
- iv) Offshore and through-routeing information. See para f below.
- v) Coastal routes and geographical areas. See para g below.
- vi) Appendices for detailed regulations etc. See para h below.
- vii) Illustrations. See para i below.
- viii) Alphabetical index. See para j below.

b) Separate volume for general information:

When several volumes of Sailing Directions cover a major sea area, or a landlocked sea, it may be more expedient for some of the general information (see a(ii) above), the environmental information (see a(iii) above) and the through-routeing to form a separate volume covering the whole of the major sea area.

c) Preliminary pages comprising:

- i) Title page showing date of issue, latest Notice to Mariners used, short statement on method of correction. Preface with bibliography of source material (*see C1.4 and C2.1*).
- ii) List of contents and diagrams, etc.

- iii) Explanatory Notes on terms and conventions used.
 - iv) List of abbreviations used.
 - v) Glossary of foreign and special words found on charts and in the text. A transliteration alphabet and/or notes on the system used when this is necessary.
 - vi) Index chartlet (*see C2.4*).
- d) First chapter or section should contain the following information:

Charts and charting. Remarks on the general quality of the charts (paper and digital) available for the area, use of charts other than those of own nationality; remarks on important differences of geographical or tidal datum between charts.

Buoys and beacons. Descriptions of systems in use if differing from IALA Regions A or B.

Navigation. General remarks on navigation in coral waters; notes on the existence of large amounts of kelp; ice navigation and ice-breaker service available where these are applicable to the area; any other notes applicable to navigation throughout the area covered by the book, such as fishing and other maritime activities.

Regulations. Extracts of national regulations concerning navigation, pollution, quarantine, cables, pipelines and any other special regulations that should be known to mariners before arrival in national waters. The territorial sea and economic zones claimed should be given in general terms.

Radio services. General remarks on the availability and reliability of radio position fixing systems, radio beacons, navigational warnings, and weather forecasts. This section should not duplicate the details of times of operation and the frequencies if these are given in separate radio publications.

Pilotage. General remarks on pilotage services in the areas, national regulations regarding pilotage. Where there are standard regulations for pilots applicable to all parts of the area, these can be given to avoid repetition elsewhere in the book. Special regulations applicable only to individual ports are best given at the port concerned rather than in the first chapter.

Visual signals. Systems of signals in use in the area for storm, weather, dredging, traffic and other special maritime activities should be described. These should not include well-known international signals; special signals only applicable to an individual port are best given with the main description of the port.

Distress and rescue. Brief description of the sea/air rescue organisations that may be in operation for the area covered by the book.

Countries. Brief information about the countries in the area of interest to the mariner.

Principal ports and anchorages. A list of ports and anchorages in the area giving position, principal purpose, brief statement on limiting conditions such as depth of water, or size of vessel that can use the port, whether it is a port of entry, cross-reference to other parts of the book or other publications where further information can be obtained.

Port services. A list of places should be given where fuel, fresh water, repairs, docking, fumigation, and diplomatic representatives are available.

- e) Second chapter or section should contain:

Environmental conditions. General information concerning bottom topography, if relevant, seismic activity, currents, tidal streams, oceanography, ice conditions with diagrams, sea and swell, surface meteorological information with seasonal diagrams and climatic tables for selected places on the coast.

See also C3.12, C3.13

- f) Third chapter or section should deal with the following:

Through routes and traffic separation

Landfall aids and landmarks

Offshore activities and hazards affecting navigation offshore and for passing through the area.

In complex geographical areas it may be necessary to have other local through-routeing chapters or sections.

See also C2.7

g) Subsequent chapters or sections. After the main through-route chapter, the book should be subdivided into chapters or sections as necessary using the "waterway" principle (see below).

The contents of chapters or sections should be determined by the needs of navigation to form logical geographical units.

See also C2.8(a).

The "waterway" principle means that it is the channel or coastal route that is being described and not the coast. For example:

Strait of Gibraltar - Through route

Strait of Gibraltar - North side

Strait of Gibraltar - South side

rather than

Spain - South coast

Morocco - North coast

A large island having a passage either side of it should not be described as a whole, but in the form of a passage along one side and then a passage along the other side.

h) Appendices. These may be inserted after the main text and should be used to contain lengthy regulations, or extensive lists of restricted areas, coastal distance tables and other matter that might be inconvenient with the main text.

i) Illustrations should whenever possible be included within the text.

See also C3.20

j) Index. A comprehensive index (primarily of place names) should be included. (*see also C1.3*). The index may also contain latitudes and longitudes as well as paragraph or page references for the text.

C 2.3 STANDARDIZATION OF SAILING DIRECTIONS

1.- It is recommended to standardize as far as is reasonable, the general structure and arrangement of books of Sailing Directions published by Member States, but not to the extent of constraining all thought and innovation for improvement.

C2.4 INDEX CHARTS IN SAILING DIRECTIONS

1.- It is strongly recommended that each country publish an index chart showing that portion of the world covered by its volumes of Sailing Directions.

2.- It is strongly recommended that each volume contain an index chart or charts showing the following:

- Coastal outline and border with latitude and longitude graduation.
- Limits of area covered by the volume.
- Title and number of the adjacent volumes.

- Limits and numbers of the charts for the area.
- Names of principal ports, bays, channels sea areas, headlands, islands and countries, as far as this is consistent with clarity.
- Limits of chapters or sections to show the area covered and the direction in which the text proceeds.

See also C2.1, C2.2(c).

C 2.6 INDICATION OF GEOGRAPHICAL POSITIONS

- 1.- It is resolved that geographical positions (latitude and longitude) should be quoted as precisely as possible to enhance the utility of positional information when used in electronic systems.

C 2.7 INSTRUCTIONS FOR THROUGH TRAFFIC IN DIFFICULT WATERS

- 1.- It is recommended that general information on through routes, reporting points, traffic separation schemes, the general track followed by shipping, should be described if known. In some areas there may be very little to describe, in others the recommended through-routes may be complex and it may be necessary to have a separate chapter.

See also C2.2(b).

- 2.- It is recommended that when a channel is referred to in several parts of the same volume, the complete instructions for this channel be given in a separate chapter, or that such instructions be linked by adequate page references.

- 3.- It is recommended that general information on the following subjects that affect ships passing through the area should be given; for example, exercise areas, fishing, exploration and exploitation of the seabed, and ice-breaking services.

See also C2.2, C3.16

C2.8 ARRANGEMENT OF INFORMATION

- 1.- It is recommended that in printed publications the information in chapters or sections be arranged as follows. The style may be in the form of a notebook with bullet point side headings containing single sentence statements. Information that properly rests in another publication shall be omitted or reference only made to that publication.

a) Waterways and coast

Chapters or sections should begin with introductory paragraphs dealing with general information applicable to the whole area of the chapter or section, see below:

General aspect and remarks about the waterway and shores.

Water level peculiarities and irregularities (*C3.11*).

Currents and tidal streams.

Local meteorological conditions.

Local ice conditions.

Fishing activity.

Offshore or coastal activities dangerous to shipping such as drilling platforms, military exercises, dumping grounds.

Magnetic anomalies.

Regulations.

Pilotage.

Submarine cables and pipelines of a general nature (C3.10).

After the introductory paragraphs, each significant portion of the waterway or coastal route should contain the following information of a more local nature:

Route - general description.

Controlling depth or least charted depth in the fairway.

Regulations for traffic separation, movement reporting, prohibited areas (C3.16).

Local pilotage.

Currents, tidal streams, overfalls.

Local winds and fogs, etc.

Principal marks and navigation aids (C3.17).

Directions for the waterway or coastal passage.

Directions for approaches to harbours and anchorages.

Anchorages and harbours.

Minor side channels for small craft (less than 2m draught, or 12m in length).

Small craft anchorages, harbours and marinas not falling within larger harbours.

b) Port information

Name and position of port or harbour.

Limits of port.

General remarks on type of port, main function, and amount of traffic handled.

Port authority.

Limiting conditions due to draught, size of vessel (C3.3, C3.4).

Water level and mean tidal range.

Density or salinity of water if differing from normal seawater (C3.14).

Ice.

Local meteorological conditions.

Arrival information required and notice for ETA.

Port information service, signal stations.

Pilotage and tugs.

Regulations.

Outer anchorages and sea berths.

Tidal streams.

Entrance channel or fairway.

Traffic signals.

Directions for entering.

Berths, basins and depths of water. } (see C3.4).

Port facilities in brief for cargo handling, ro-ro, containers, lighters, cranes, etc.

Repair facilities, dry docking, and slipways.

Supplies of fuel, water, etc.

Transport facilities from the port by sea, road, rail, canal and nearest main airport.

CHAPTER C - SAILING DIRECTIONS

SECTION 3 - CONTENT

C 3.3 DIMENSIONS OF SHIPS ADMITTED INTO HARBOURS

1.- It is strongly recommended that the maximum dimensions of ships normally admitted into harbours, as fixed by the harbour authorities, be given in Sailing Directions.

C 3.4 DATE OF CERTAIN ESSENTIAL INFORMATION

1.- It is recommended that critical types of information contained in Sailing Directions, such as instructions for entering harbours, depths of water, channels, etc., be followed by the date, in brackets, when the data were last checked.

C 3.5 UNVERIFIED INFORMATION

1.- It is recommended that unconfirmed items of information should not appear in the Sailing Directions unless there is a potential hazard.

C 3.6 DREDGED CHANNELS OR AREAS

1.- It is resolved that the following information concerning dredged channels or areas shall be inserted in Sailing Directions only when it is not shown on the chart:

- i) Depth to which the channel or area has been dredged.
- ii) Year of the last dredging.

C 3.7 SWEPT AREAS

1.- It is recommended that for areas where the nature of the bottom is such that depths tend to vary and the changes have practical significance to surface navigation, the latest date on which they were swept be indicated in Sailing Directions, but only when it is not shown on the chart.

C 3.8 CLEARANCES UNDER BRIDGES AND AERIAL CABLES

1.- It is resolved that minimum vertical clearance shall always be given in Sailing Directions in respect of bridges, viaducts, overhead transporters, aerial cable-ways, power transmission cables and telegraphic and telephonic cables crossing navigable waters; even when this information is shown on the chart.

2.- It is recommended that, in the case of overhead transporters and aerial cable-ways, the clearance of the bridge or the cable itself, as well as that of the cars when in motion, be indicated; even when this information is shown on the chart.

3.- It is resolved that the navigable width shall always be given for bridges and viaducts crossing navigable waters.

C 3.10 SUBMARINE CABLES

1.- It is recommended that general information supplied to mariners by Hydrographic Offices either in Sailing Directions or in other documents include a note which specifies:

- i) that very high voltages are carried in modern multi-channel telegraphic and telephone cables;
- ii) that consequently it is most dangerous to attempt to free an anchor or trawl by hauling in the cable; the anchor or trawl should be buoyed and cast off.

C 3.11 TIDAL INFORMATION TO BE GIVEN IN SAILING DIRECTIONS

1.- It is recommended that in Sailing Directions information regarding tides already given on charts and in Tide Tables should not be included. However, peculiarities and irregularities should be fully described.

2.- It is recommended that information be given showing, for the year, seasons or months at a certain place or area, adequate data concerning the deviations of water level, in relation to chart datum, resulting from meteorological and other random or seasonal influences.

a) This information may have to be mentioned in three ways, namely:

- i) General information for the area in the first chapter (*see C2.2*).
- ii) Coastal information where it occurs geographically in the text (*see C2.8*).
- iii) For a specific port (*see C2.8*).

3.- It is recommended that when the above information appears in Sailing Directions a reference to this effect be inserted on the charts concerned.

See also A2.9.

C 3.12 METEOROLOGICAL INFORMATION

1.- It is recommended that a chapter at the beginning of each volume of Sailing Directions give all general meteorological and ice information concerning the region covered by the volume.

a) Local meteorological and ice information (e.g. prevailing winds in a port) could also be added in the chapters or sections.

See also C2.2(5).

C 3.13 OCEANOGRAPHIC INFORMATION

1.- It is recommended that the introductory part of Sailing Directions includes oceanographic information concerning general currents and a brief account of the main characteristics (temperature, salinity, density) of surface water.

2.- It is recommended that a reference be made to the relevant oceanographic and tidal atlases, whenever possible.

See also C2.2(e).

C 3.14 DENSITY AND SALINITY OF WATER

1.- It is recommended that, when available, the density and/or the salinity of the water at ports of the world be inserted in Sailing Directions.

See also C2.8(b)

C 3.16 RECOMMENDED TRAFFIC SEPARATION SCHEMES IN CONGESTED AREAS

1.- It is strongly recommended that details of traffic separation schemes should always be given in Sailing Directions.

See also C2.7, C2.8, A1.17

C 3.17 LANDFALL DESCRIPTIONS

1.- It is recommended that landfalls be described before giving a detailed description of the coast for the use of a navigator sailing along it.

2.- It is recommended that, for a landfall from offshore, the description be given in the order in which features become visible to the navigator approaching from the most usual direction. The description will give, first, offshore islands, then mountains, then visible landmarks, etc. Then at the end of the section will be given all information known about ports and anchorages, unless this appears as part of the usual description of the coast, in which case an appropriate reference will be inserted.

3.- It is recommended that, in the case of arrival at an estuary, a description (lateral marks, beaconage, alignments, etc.) of the entire length of the various channels, one after the other, in decreasing order of importance, be given, followed possibly by a description of the banks and dangers situated between these entrance channels, as well as of landmarks of secondary importance.

See also C2.8

C 3.19 EXTENT OF INFORMATION

1.- It is strongly recommended that:

- a) Nautical publications should only contain such information as is useful for mariners.
- b) Information should be presented clearly and distinctly so as to facilitate scanning of the publication and to avoid time-consuming reading of extensive text.
- c) Information given in other nautical documents should not be repeated except as necessary to give a clear description.
- d) It is not the function of the Sailing Directions to give a written description of the chart.

Information should be selected on the following basis:

The general layout of the passage or channel routeing and regulations, pilotage, environmental conditions, etc.

Features that are useful navigationally as landmarks or seamarks.

Features that are applicable to navigation that may be used as leads, or have to be avoided, or passed or otherwise are relevant to vessels likely to use the waterway.

Features relevant to anchorages and berths.

e) Those features that are selected for mention in Sailing Directions should be described as follows:

If full details can be seen on the charts, then the feature need not be mentioned unless visual identification is problematic.

If there is more information than is shown on the charts and the absence of such additional information is potentially dangerous navigationally, then this should be given in the text of the Sailing Directions.

C 3.20 ILLUSTRATIONS AND SKETCHES IN SAILING DIRECTIONS

1.- It is recommended that sketch plans, aerial oblique photographs or other illustrations and photographs be used where possible to improve the descriptions given in the text. Sketch plans should not duplicate that which can be clearly appreciated from the charts.

C 3.21 LAWS AND REGULATIONS

1.- It is recommended that Sailing Directions include the important portions of laws and regulations appertaining to navigation which should be known by mariners before arrival at an anchorage or port.

a) In many cases it will suffice to paraphrase the important portions, but if the regulations are complex then the full (translated) text may need to be given in addition as an Appendix.

ANNEX C TO THE REPORT OF THE SNPWG

REVISED TERMS OF REFERENCE FOR THE STANDARDIZATION OF NAUTICAL PUBLICATIONS WORKING GROUP (SNPWG)

(approved by CHRIS13)

1. Objective

To develop guidelines for the preparation of nautical publications, primarily in a digital format compatible with ECDIS and secondly in paper and digital formats, as stand-alone publications.

2. Definition

A Nautical Publication is a special-purpose book, or a specially compiled database, that is issued officially by or on the authority of a Government, authorized Hydrographic Office or other relevant government institution and is designed to meet the requirements of marine navigation. Nautical publications include but are not limited to:

*Distance Tables,
List of Buoys and Beacons,
List of Lights
List of Radio Signals
List of Symbols, Abbreviations and Terms used on Charts
Mariners' Handbooks
Notices to Mariners
Routeing Guides
Sailing Directions
Tidal Stream Atlases
Tide Tables*

Nautical publications can be made available in a paper or a digital format.

3. Authority

This Working Group (WG) is a subsidiary of the Committee on Hydrographic Requirements for Information Systems (CHRIS) and its membership and decisions are subject to CHRIS approval.

4. Execution

a) The WG should:

- ~~(i) Review the requirements of international shipping for nautical paper and digital publications.~~
- ~~(ii) Review existing publications intended for international shipping.~~
- ~~(iii) Review the existing IHO technical resolutions, guidelines, specifications and standards which relate to nautical publications, initially focusing on Sailing Directions.~~
- (iv) Investigate restructuring the data format specifications and content and display requirements of digital nautical publications in order to optimize their reproduction in digital and paper formats, and to

~~facilitate their integration with information systems such as intended for use in ECDIS. Initial focus should be given to Sailing Directions, to define:~~

- ~~1) the minimum content of digital Sailing Directions compatible with ECDIS, and~~
- ~~2) the minimum common content of both digital and paper Sailing Directions, as stand-alone documents.~~

(vii) Draft guidance document(s) and/or revised technical resolutions, as instructed by CHRIS appropriate.

(viii) Liaise with relevant IHO Technical WG's to ensure, technical feasibility and compatibility of any developed proposals. Investigate the production of specifications for International (INT) nautical publications (e.g. Sailing Directions, List of Lights and Radio Signals).

b) The WG should liaise with other CHRIS WG's and other IHO and international bodies as appropriate and as instructed by CHRIS.

5. Chairmanship and Procedures

- a) The WG shall comprise representatives of IHO Member States (M/S) and Expert Contributors.
- b) The WG should work primarily by correspondence. The WG should attempt to meet at least once every two years, normally in connection with another convenient IHO forum.
- c) Decisions should generally be made by consensus. If votes are required on issues or to endorse proposals presented to the WG, only M/S may cast a vote. Votes shall be on the basis of one vote per M/S represented.
- d) Expert Contributor membership is open to entities and organisations that can provide a relevant and constructive contribution to the work of the WG.
- e) The WG shall be chaired by a representative of a M/S. The Chairman and the Vice-Chairman shall be chosen by the M/S represented in the WG, for a period of three years.
- f) Expert Contributors shall seek approval of membership from the Chairman.
- g) Expert Contributor membership may be withdrawn in the event that a majority of the M/S represented in the WG agree that an Expert Contributor's continued participation is irrelevant or unconstructive to the work of the WG.
- h) All members shall inform the Chairman in advance of their intention to attend meetings of the WG.
- i) In the event that a large number of Expert Contributor members seek to attend a meeting, the Chairman may restrict attendance by inviting Expert Contributors to act through one or more collective representatives.