INTERNATIONAL HYDROGRAPHIC ORGANIZATION

ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

CHART STANDARDIZATION & PAPER CHART WORKING GROUP
(CSPCWG)

[A Working Group of the Hydrographic Services and Standards Committee (HSSC)]

Chairman: Peter JONES
Secretary: Andrew HEATH-COLEMAN

UK Hydrographic Office
Admiralty Way, Taunton, Somerset
TA1 2DN, United Kingdom

CSPCWG Letter: 05/2013

UKHO ref: HA317/010/031-10 &
             HA317/004/063-01

Telephone:
 (Chairman) +44 (0) 1823 337900 ext 3311
 (Secretary) +44 (0) 1823 337900 ext 3656
Facsimile: +44 (0) 1823 325823
E-mail: peter.jones@ukho.gov.uk
              andrew.coleman@ukho.gov.uk

To CSPCWG Members

Date 23 April 2013

Dear Colleagues,

<u>Subject: Revision of S-4 B-500 (Round 2).</u>

Thank you to the 22 Working Group members who responded to Letter 03/2013. We were slightly surprised and very pleased by the amount of interest the revision of B-500 generated. As usual, we have included a consolidated list of the responses, together with my comments, at Annex A.

It quickly became clear that we needed to include some more information about 'Geographic naming bodies', so we included a new introductory section B-500. Thank you especially to New Zealand, who supplied improved definitions from the UNGEGN Glossary of Terms (to which we do not have access). There remain a couple of questions which we hope New Zealand can advise on (see marginal comments in section B-501).

Sweden commented that the wording at B-550.3 is quite complex and difficult to understand and requested a simplified version. We have made an attempt, for the moment including both. We will welcome your views on this.

The new section on cartographic principles seems to have been well received. Various members offered some additional graphics and suggested modifications, most of which are now incorporated.

The debate about the appropriate replacement for the term 'type styles' was interesting. Although by no means conclusive, we now see that 'fonts' are not quite the same thing as 'text styles'. We feel that the revised title and the changes made in B-561 onwards reflect the nearest we could achieve to a consensus.

Annex B (separate document) is a 'round 2' version of Section B-500. For your convenience, we have included a response form at Annex C with particular questions on which we would welcome your views; however, please feel free to comment on any other points as well.
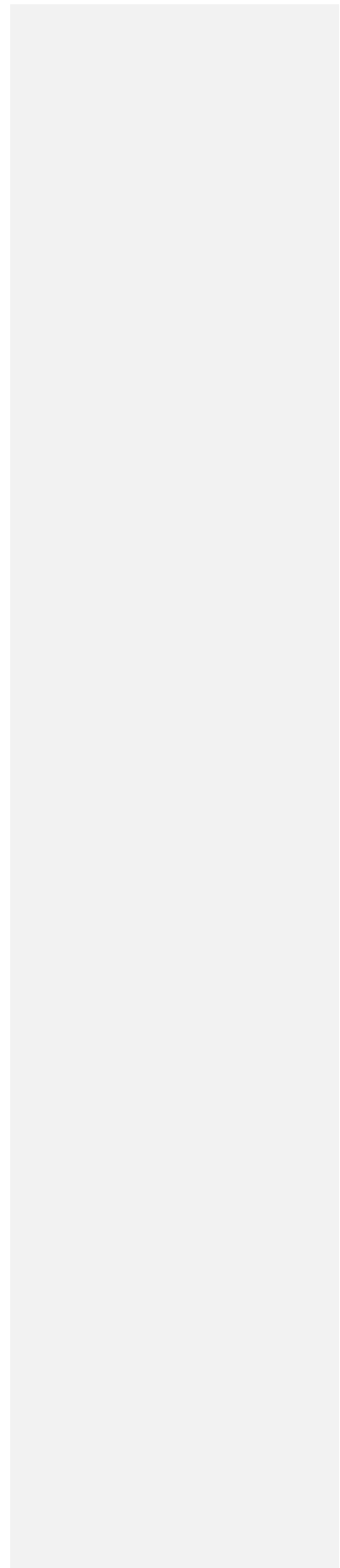
Please respond, using Annex C, but also with a track change version of Annex A if necessary, **by 21 May 2011.**

Yours sincerely,

Peter G.B. Jones,
Chairman

Annex A: Consolidated responses to WG Letter 3/2013, with Chairman's comments
Annex B: Draft revision of S-4 Section B-500 (separate document).
Annex C: Response form.

DRAFT REVISION OF S-4 SECTION B-500 ROUND 1

Consolidated responses, with Chairman's comments in red.

Specification	Question	Yes	No
Section title	Can you suggest a better (ie more succinct) title? (If yes, please include in comments below). Chairman: changed, but not more succinct!	AU, DE, GR, IN, NO, US, ZA	BR, CA, DK, ESRI, ES, FI, FR, IT, JP, LV, NL, NZ, SE, UA, UK
510.3	Do you agree that the existing paragraph can be deleted? It is perceived to be contrary to the guidance in new B-550.3, derived from Res. 8/1919. Chairman: almost unanimous and GR gives no explanation.	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, IN, IT, JP, LV, NL, NO, NZ, SE, UA, UK, US, ZA	GR
550.3	Is there a better term than 'foreign coasts'? Chairman: The two suggestions to replace 'foreign' are 'non-national' and 'other nations'. 18 members support retaining 'foreign'. No change.	DE, GR, NZ	AU, BR, CA, DK, ES, ESRI, FI, FR, IN, IT, JP, LV, NL, NO, SE, UA, UK, US, ZA
551.2	Do you agree to add the following clarification to B-435f? Where reference names in authoritative documents, eg in IMO's publication 'Ships' Routeing', do not conform with the official names used by the sovereign state, these reference names may be shown on charts, specifically linked to the feature they are referencing, to assist the chart user. Chairman: unanimous! We will include in the next edition of S-4.	AU, BR, CA, DE, DK, ES, ESRI, FI, FR, GR, IN, IT, JP, LV, NL, NO, NZ, SE, UA, UK, US, ZA	
560.4 (last bullet)	There seem to be different conventions for positioning letters on light arcs; we have applied the convention as in FR INT1. The options are that the legend should always be 'inside' or 'outside' (as DE/ES INT1) the arc. Is a convention useful? Chairman: almost unanimous and BR gives no explanation.	AU, CA, DE, DK, ES, ESRI, IN, IT, FI, FR, GR, LV, NL, NO, NZ, SE, UA, UK, US, ZA	BR

Specification	Question	Yes a	Yes b	No c
	If so, which is preferred? (Please indicate a, b or c in the yes column): a. above (ie north of) the arcs b. inside the arcs c. outside the arcs Chairman: A clear majority favour 'c'. Text amended accordingly.	FR ESRI NL UK	JP	AU, CA, DE, DK, ES, FI, GR, IN, IT, LV, NO, NZ, SE, UA, US, ZA

Specification	Question	a	b	c	d
561	Which replacement for 'Type styles' do you prefer? (Please indicate a, b, c or d in the yes column): a. Fonts b. Text styles c. Lettering styles d. something else (please specify below) Chairman: note that GR actually proposes a + b.	BR, CA, DE(2), DK, ES, ESRI, FI, IT, JP, LV, NL, NO, NZ, SE, UK	AU, FR(1), UA, IN, DE(1), US	FR (2)	GR, ZA

Further comments

AUSTRALIA (also supplied track change copy) Used as appropriate.

Section title: The word "font" is not used anywhere else in S-4. The closest example I could find was "style of text", and this is used a few times (the heading of clause B-425.4 is "Style of

abbreviations"; B-412.1 is "Style of sounding numerals"; B-425.4 is "Style of abbreviations"), and B-212.8 mentions "style" of border graduations; B-340.2 refers to B-340.3 for "styles" of legends; B-352.3 refers to "style" for spot heights; B-412.4 refers to different "style" for unreliable soundings; etc (word search on "style"). Consider just using "style" (or "text style" in some headings) would be sufficient, and be consistent with the rest of S-4 Part B. <u>Note:</u> The term "type style" is also used in B-110.5, and will need to be amended in accordance with the CSPCWG decision.

Chairman: See comment against revised title in round 2.

<u>B-522:</u> The first sentence of the second paragraph reads disjointed. Suggest amend to read "Non-alphanumeric symbols representing units (eg: °, ′, ″) and other universally recognized marks (eg: &, +, @, ©, §) may be used on charts.".

Chairman: Agree.

<u>B-550.3(e):</u> Happy to retain the last sentence.

Chairman: Retained. (But not if the 'simplified version' of B-550.3 is accepted).

<u>B-560.4:</u> Do not consider an area limit to be a "linear feature". Suggest this clause be amended to read "**Names of Linear Features (eg rivers, canals, pipelines) and along area limits.**".

Chairman: Agree.

<u>B-560.4:</u> Suggest amend first bullet point to read: "Names are generally better placed above linear features rather ….".

Chairman: Agree.

<u>B-560.4:</u> Suggest amend 3rd bullet point to read: "Names and legends associated with lines representing area limits ….".

Chairman: Agree.

<u>B-560.4:</u> Suggest amend 4th bullet point to read: "Names and legends associated with area limits which run north-south should be oriented so as to be most easily read from the bottom centre of the sheet: ie …." to be consistent with the wording in the 3rd bullet (and also noting that the name or legend can be positioned horizontally within the area).

Chairman: Agree.

<u>B-560.4 5th bullet point:</u> Australian convention is to position all light sector arc legends outside the arc and oriented to read from the bottom of the chart. Our main reason for this is that there is less likely to be any issue with placement of the text due to the width of the arc (i.e. for narrow sectors).

Chairman: Accords with majority.

<u>CANADA</u>

Title & 561 – the term "Font" is used in our CARIS HPD production system so that is fine by CA

Chairman: See comment against revised title in round 2.

560.1 – 7th bullet – more often than not it is most practical to place the name of a shoal adjacent to it as opposed to on it since shoals are often identified by a single shoal sounding. My suggestion is to remove the term *shoal* from this example.

Chairman: Changed to 'large shoal areas'.

560.2 - The CA convention for priority of name placement is displayed in the following diagram. Perhaps for this section a diagram like this which shows overall preference for both straight and curved names would be preferred?

4th preference   3rd preference

2nd preference   1st preference

4th preference   3rd preference
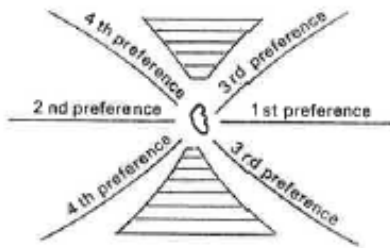
Chairman: needs to be subject to B560.3 bullet 2. Additional wording and diagram included.

FINLAND

B-520 – "If an internationally-approved system exists, it must be used; failing this a national system may be employed." – How do we define 'internationally-approved' in this context? UN? ISO? Or even BGN/PBGN? For example, Russian names are romanized from Cyrillic differently depending which "internationally-agreed" system is used. The island of Большой Тютерс in the Gulf of Finland appears as Bol'šoj Tjuters on FI and DE charts and as Bol'shoy Tyuters on RU, EE and GB charts. The former is according to UN system and the latter BGN/PCGN. Applying ISO 9:1995 would result to Bol'šoj Tûters. When FI renewed its charts covering Russian waters a few years back, the UN system was recommended by the Institute for the Languages of Finland to be used on English-language charts.
Chairman: see comment in round 2.

B-521.3 – "the usual order" – Is this clear enough? For example, if you ask the Estonians they would tell you that usually Z is not at the end of the alphabet, but between S and T…
Chairman: This refers to the basic Roman (or Latin) alphabet, which is A-B-C-D-E-F-G-H-I-J-K-L-M-N-O-P-Q-R-S-T-U-V-W-X-Y-Z. Many nations add extra letters, diacritical marks and this is covered by the last sentence. Estonia appears to be an exception in placing a standard letter 'Z' after 'S', although I understand Estonian does not actually include a 'Z' except in 'borrowed' words. I think 'usual order' adequately covers this.

FRANCE
Section title: France agrees except for the use of Fonts which is ambiguous in French. Text styles or Lettering styles should be more appropriate.
Chairman: See comment against revised title in round 2.

B-501: France suggest adding in **Toponym** all the toponyms listed in **Generic term, Descriptive term, Specific term, Simple, toponym, Compound toponym, Original form of a toponym, Exonym**, in order to have a list of examples as complete as possible.
Chairman: I think this would make the list of examples against 'toponym' too long (we would have to add Rotes Kliff, Lille Fiskebank, Orkney Islands, København and perhaps the exonyms too). It is difficult to see what this would achieve; it could actually confuse.

B-522: France wonders the meaning of the sentence and ask if it is "Punctuation should conform to conventional English practice for English texts"?
Chairman: wording revised.

B-531: The proposition for the decimal separator seems to be different from B-120.2:
"Decimal places are indicated by commas, e.g. 0,1mm"
Chairman: B-120.2 refers specifically to what we use in S-4. B-531 reflects the wording at B-131 (4th bullet) which applies to charts.

B-550.3 e): This paragraph seems in disagreement with B-552.1 (I). The last sentence seems not necessary for the compiler, except the reference to B-552.
Chairman: Not in disagreement, simply that different rules apply to national (B-550.3e) and International (B-552.1I) charts. However, we agree that 'On all its charts' could be misleading and will amend to 'On all its non-INT charts'.

B-550.5 Is it possible to give an example to illustrate the last part of the last sentence ("use of symbols"): "Descriptive terms should be reduced to a minimum by the use of symbols wherever possible."?
Chairman: could add 'eg use of symbol F10 instead of descriptive term "Fishing Harbour"'.

B-560.1 second bullet: France proposes to add a rule to limit the space between letters to 5 times the values height of the letters.
Chairman: Agree.

B-560.1 5th bullet: France proposes to add some words like (spacing, position of the name in regard of the area…) at the end.
Chairman: On reconsideration, this bullet does not give much information. B-560.5 is sufficient.

B-560.3, to illustrate the 5th bullet, France suggests adding the following scheme (based on a French rule) if acceptable:
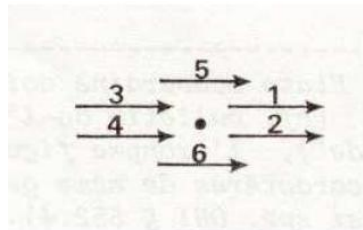

Chairman: Bullets 2-5 concern curved names; this appears to be a convention for horizontal straight names (bullet 1). Presuming the numbers illustrate preferences, they do not reflect other factors, eg as 560.3 bullet 2. Additional wording and graphic included.

B-560.4, 1st bullet: Could you precise the mean of "most English words have fewer descenders than ascenders in lower-case"? Is it applicable to other languages?
Chairman: In the word 'applicable' there are 2 'descenders' (pp) and three 'ascenders' (lbl). I do not know whether it is true of other languages.

B-560.4, to illustrate the 4th bullet, France suggests adding the following scheme (based on a French rule) if acceptable:
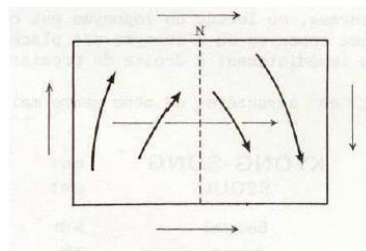
Chairman: Agree, this illustration seem useful.

B-563.2 France suggests adding "which are not navigationally significant features" in:

"Use of serified fonts. If a serifed style is used (in addition to the sans-serif font), its use should be restricted to the more important geographic names <u>which are not navigationally significant features</u> (see B-563.1); …" and deleting this part in the last part of the sentence.
Chairman: Agree.

GERMANY
Section title: Text: Language, numbers, names, styles
Chairman: See comment against revised title in round 2.

550.3: "foreign waters", for a) we could use "home waters" instead of "own coastal areas"
Chairman: see comment in round 2.

501: toponymy: I agree to use UNGEGN definitions.
Chairman: Agree.

change example ROTE KLIFF for compound toponym to ROTES KLIFF
Chairman: Accepted, but should we also change ROTE to ROTES at 'Descriptive name' and 'Specific term'?

I miss the term endonym and the some explanation about the use of .
 UNGEGN defines:
   Endonym: Name of a geographical feature in an official or well-established language occurring in that area where the feature is located.
   Exonym: Name used in a specific language for a geographical feature situated outside the area where that language is spoken, and differing in its form from the name used in an official or well-established language of that area where the geographical feature is located.
Chairman: '(Endonym)' added as an alternative for 'Original form', from Norway's mark up.

520: We have the same problems as stated by FI in our co-operation charts with PL who overtakes the RU/GB romanization solution . The internationally approved system should be the UN (United Nations Group of Experts on Geographical Names) – still it is only GOST 83.
Chairman: See comment in round 2.

530: We use a roman numeral for the month of the edition in the small correction date. Could this possibility be included?
Chairman: Reworded to include text 'in the border'.

551.1b: I am only aware of the 5th Edition 1984 as the latest. Is there planned a New Edition or has the GDA 2003 included updated names?
Chairman: I am not sure which publication you are referring to. According to the IHO download list: B1 is Edition 3 (2003); B6 is Edition 4 (2008); B8 is a spreadsheet dated 2012.

552.1 and **552.3**: Do we still need the I at the paragraph number?
Chairman: Yes, as these rules do not apply to national charts.

552.3: another suiting example is the feature "bay"
Chairman: A bay cannot mark an international boundary, but could contain one. Wording altered.

560.2 3rd and 4th bullets: The explanation is not understandable for us as we use a convention similar to 560.3 bullet 5
Chairman: It is not usually possible to name a point feature on the coast with a legend above or below the feature as B560.3 bullet 5 (as it would break the coast). These bullets are to make the point that a legend on a curve is better than an oblique legend. We have added some examples.

562.3: I propose to add the example "shoals" in the last sentence.
Chairman: I do not think this is appropriate, as the point size might need to be varied according to the extent of the shoal area.

GREECE

1. TEXT: LANGUAGE, NUMBERS, NAMES, FONTS (TEXT STYLES)
Chairman: See comment against revised title in round 2.

2. In **B-501** the term "**Toponymy**" is revised according to the definition in S-32. However, I believe that the revised definition does not render the exact meaning of the word.

Especially the first part (in red)

> **The place names** or the study of place names of a country or district

could stand as a good definition for "Toponyms".

Toponymy is the study of place names (toponyms), their origins, meanings, use and typology. The word "toponymy" is derived from the Greek words *tópos* (τόπος) ("place") and *ónoma* (ὄνομα) ("name"). Toponymy is itself a branch of onomastics, the study of names of all kinds. Therefore, I propose:

  a. Change the definition for Toponymy to "**The study of place names of a country or district**".
  b. Revise the term toponymy in S-32 accordingly.
Chairman: see revised text in round 2. We will forward to the HDWG for S-32.

3. **B-550.3** A better term, instead of "**foreign coasts**" could be "**Non-national coasts**"
Chairman: Most are content with 'Foreign'. Non-national would be an option, but does not seem any better.

4. **B-561** A better replacement for "**Type styles**" could be "**Fonts** (**Text styles**)".
Chairman: We have differentiated 'Style' and 'Font' in accordance with the advice received from various WG members.

INDIA

Section Title: TEXT: LANGUAGE, NUMBERS, NAMES, FONTS & STYLE/PATTERN
Chairman: See comment against revised title in round 2.

ITALY

1. We agree on deletion of paragraph B-510.3 but what follows should be better explained, perhaps at the end of point B-552.2:

Toponyms and countries: Toponyms and names of sovereign states should be given in the original form subject to the provisions of B-520 (Transliteration). They should not be translated.
The producer or printer nation may add an exonym underneath the original form (eg. *Original form*: Tarābulus *Exonym*: Tripoli; *Original form*: Lībiyā *Exonym* Libya), unbracketed and in a font and/or point size which is subordinate to the original form.

Chairman:B-552.2 is specifically about country names on INT charts, where the rules are different from national charts (see 550.3e).

2. We should pay attention to point B-440.1 and B-440.3 that refer to point B-552.4, which has now been deleted.
Chairman: Thank you, we will amend these cross references when revised B-500 is published.

3. At point B-560.2 it would be better to insert, as an example, a real map (with a coastline and toponyms) to explain straight or curved names.

Chairman: further example diagrams added.

4. At point B-560.4, the legends on arcs should refer to B-475.2 where the same clarification should be given. It would be better to insert a simple graph where, for a light placed in P, the text should be oriented as follows:
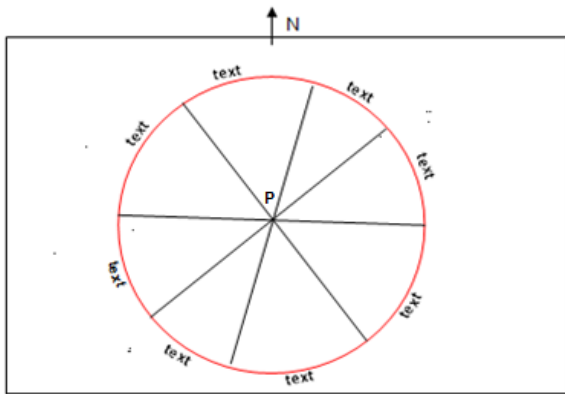
Chairman: this is a useful diagram, but we will replace the centre and 'P' with a light star and flare. The graphics in B-475.2 (and FR INT1) will need correction.

NEW ZEALAND (also supplied track change copy)

Please see the track changes version of 'B-500 round 1' with comments by the NZ Geographic Board.

Chairman: This was helpful, thank you.

550.3
Possibly 'Other nations coastal areas'.

Chairman: Most are content with 'Foreign'. 'Other nations' would be an option, but does not seem any better.

NORWAY (also supplied track change copy) Chairman: This only concerns B501 and has been covered by attention to the NZ mark up copy. '(Endonym)' has also been added.

Section title: LANGUAGE, NUMBERS, NAMES, FONTS / TEXT STYLES
Chairman: See comment against revised title in round 2.

B 540.3: Abbreviations. Use of full stop in light descriptions does not give the text more sense, information or readability. Norwegian charts show light characteristics without the use of full stop, and have never received any negative feedback for doing this. Norway does not support use of full stop in light characteristics.

Chairman: this minority opinion was discussed during the revision of B-471.9 and the alternative of omitting the full stops and retaining the spaces is explained there. Here, the use of the full stops in seabed qualities and light description are exceptions to the general rule, as practiced by most HOs.

SOUTH AFRICA

Section title and Section 561: *RSA recommends the use of TYPOGRAPHY in the Section Title and the retention of the word STYLE in Section 561 specifically and in SECTION 500 in general.*
Chairman: See comment against revised title in round 2.

The word 'style' is used a number of times in S-4 in a number of contexts. eg type 'style', border graduation 'style', 'style' of legends, line 'style' etc and for this reason we see no reason why it should be excluded from use in this section.

In coming to this conclusion I have looked at the definitions of certain terms relating to typography. From my reading on this topic and have come to the following conclusions:

TYPE STYLE: A group of fonts or font families that all share a common trait in their appearance, for example:

    Oldstyle Style of fonts such as Garamond, Bookman Old Style and Goudy Old Style etc.
    Sans Serif Style: Futura, Tahoma, Arial, Univers etc.
    Roman Style: Times New Roman, Times Ten etc.
This list of styles is not limited to these mentioned, as there are other classifications such as Modern Style.

The definition of the word **STYLES** relates to the appearance of the text to the eye in terms of the font or font families used as differentiated by the use or non-use of serifs or the general formation of the letters and is generally not concerned with the size or alignment aspects. The word **TYPOGRAPHY** is defined in the Oxford Dictionary as ".. the style and appearance of printed matter" and would in my opinion best cover all the aspects being addressed by Section 500 as to the use of typestyles, fonts and appearance of text as dictated by slope of and point size of text. In our view, the word TOPOGRAPHY therefore embraces both style and point size, STYLE does not embrace the term TYPOGRAPHY.

FONT Family: *Generically* speaking, are groups of fonts families with a similar look e.g. monospaced, serif or san-serif.

FONT Family: *Specifically* speaking , a font family is a collection of fonts that share commonalties in appearance and formation. eg. within the UNIVS font family we find Univers Light, Univers Bold, Univers Normal, Univers Light Italic etc.

Attributes of Text: The point size, alignment, horizontal spacing between individual letters in a word or between words and vertical spacing between successive lines of text are some of the variables that are used to create distinction and enable the user to assign and group certain features to certain fonts and their attributes, e.g all sounding on a chart must be either upright or italics 7 point - italics for reliable upright for unreliable soundings.
Chairman: We have differentiated Style and Font in B-561.

B-560.4 Text on Arcs:
RSA proposes that sector legends are placed on the outside of all arcs irrespective of the arcs angles of rotation. Where the arc is too narrow to contain the text on along the arc curve, it should be rotated at right angles to the arc curve on the outside of the arc.

If one adopts this option then there will be no need for further clarification to deal with arcs which are E - W in orientation.

The only other point that should be clarified is the readability of the legend i.e. the rotation of the text for E -W based sectors so that from the user's position of eye, the text legend is rotated so that it is right reading at all times.
Chairman: these are useful additional points.

BSH INT 1 version places all light sector legends outside the arc irrespective of the orientation of the arc (option c). SANHO currently bases its INT 1 on the BSH version. Admiralty INT 1 publication NP5011 indicates the position of the legend dependent on the orientation of the arc, ie, if the arc is in a southerly direction the legend is placed inside the arc, if in a northerly direction the legend is placed outside the arc, option (a) which is also in agreement with INT 3 D6067 (Use of Symbols & Abbreviations) used as a source

reference document. Due to the discrepancies between authoritative reference documents, a convention would be useful in this regard.

Additional comments concerning SECTION 500 will be provided separately.

Chairman: None received at 18/04/13. **Please now supply in response to Round 2.**

SWEDEN

B-540.3 Agree with the comment submitted by NO regarding the usage of full stops for light descriptions.

Chairman: see comment at Norway.

B-550.3 SE considers the wording in this paragraph is quite complex and difficult to understand. Even if the text is copied directly from the resolution we would prefer a simplified version.

Chairman: simplified version drafted, for comment please (see Annex C)

UK
(From Tom Richardson, TSMAD rep)
B-561 'Fonts' is consistent with ISO 19117 Geographic Information - Portrayal and OGC Symbology Encoding Implementation Specification OGC 05-077r4 Version 1.1.0. Both of these standards refer specifically to Fonts and font properties such as 'font-style' and 'font-size'. Consequently, 'Fonts' is used in the current S-100 Portrayal draft; it would seem desirable to use common terms where possible.

Chairman: See comment against revised title in round 2.

US
Section Title and 561: The United States prefers to use the term, "text style when referring to generic qualities of type such as upright, sloping, lower case etc. "Font" refers to specific type faces available in software packages or machine settings such as Helvetica, Times New Roman, Cambria, Arial etc.

Chairman: See comment against revised title in round 2.

Section 560.2 The U.S. standard for priority of name placement is identical to the response from Canada.

Chairman: See comment at CA.

PART B

———————

SECTION 500

TEXT: LANGUAGE, NUMBERS, NAMES, STYLES AND FONTS

Commentaire [c1]: This created more discussion than we anticipated. This seems the best compromise to satisfy the largest number of WG members. Although 'Typography' has some merit, we think retaining the term 'type' is retrograde, noting the terminology of ISO (and S-100)

B - 500 . 13

Page intentionally left blank

SECTION 500 - TEXT: LANGUAGE, NUMBERS, NAMES, STYLES AND FONTS

CONTENTS

B - 500 . xv

Page intentionally left blank

SECTION 500 - TEXT: LANGUAGE, NUMBERS, NAMES, FONTS

RECORD OF UPDATES

Specification Number	S-4 Edition or Amendment Number	IHO Circular Letters		Remarks
		Promulgated by	**Approved by**	
Section 500 Preliminary Edition	--	38/1980	--	Adopted by 1982 Conference, Decision No. 23
Section 500 1988 Edition	--		--	New loose-leaf edition - including editorial updating.
I-521	1/1989	31/1989	52/1989	Amendment to the sentence.
Section B-500 2005 Edition	3.000	41/2005		New format
B-510.4	3.005	82/2007	76/2008	New specification (subsequent paragraphs renumbered
2010 Edition	4.000	10/2010	49/2010	New section B-600 added
	S-4 Edition/ Revision/ Clarification			
Section B-500	4.x.x	xx/2013	xx/2013	Completely reviewed by CSPCWG; revised and updated.

Page intentionally left blank

SECTION 500
TEXT: LANGUAGE, NUMBERS, NAMES, FONTS

B-500   GEOGRAPHIC NAMING BODIES

The consistent use of accurate place names is an essential element of effective communication worldwide and is therefore a requirement for nautical charts.

The United Nations established the United Nations Group of Experts on Geographical Names (UNGEGN) in 1959 to promote the standardization of accurate spellings of geographical names worldwide. The United Nations is not a naming body. Through UNGEGN, it discusses problems encountered with national standardization of names, and prepares draft recommendations for procedures to be followed by individual countries (eg treatment of names in multi-lingual areas). It also addresses the technical aspects of names standardization. Individual countries may have naming bodies which govern national application of naming conventions, eg the New Zealand Geographic Board (NZGB), US's Board on Geographic Names (BGN).

The IHO-IOC authority for undersea feature names is the GEBCO Sub-Committee on Undersea Feature Names (SCUFN); see also B-551.1.

The following terms and definitions are consistent with the UNGEGN 'Glossary of Terms'.

B-501   TERMINOLOGY TERMS AND DEFINITIONS

The following definitions set out the meanings of the terms relating to toponymy used in this chapter:

Toponymy: ~~the place names or~~ the study of place names ~~of a country or district (S-32)~~.

> **Commentaire [c2]:** HDWG to be informed that S-32 needs review.

National language: a language in widespread and current use throughout a specific country or in parts of its territory, and often representative of the identity of its speakers. It may or may not have the status of an official language. ~~a language having official status throughout the territory under the jurisdiction of a sovereign state. (A state may have more than one national language.)~~

> **Commentaire [c3]:** Do we need a definition of 'official' language (given that we are official HOs)? **NZ please advise.**

Regional language: a language having either official or informal ~~official, literary or colloquial~~ status within part of ~~the~~ a territory under the jurisdiction of a sovereign state eg Welsh, Breton. (Regional languages may give rise to original forms of toponyms in the areas where they are spoken.)

Legend: a description, explanation, table of symbols or other information on a chart to improve its understandability and interpretation, eg:

- an amplification of a symbol not complete in itself, eg Racon, *Explosives dumping ground*

- a complement to more extensive graphical detail, eg SEE PLAN, magnetic variation quoted in a compass rose

- a statement, in the absence of a symbol for the purpose, of information having a locational element, eg *less water rep (1974), Historic Wk.*

The title of a chart was formerly considered part of the legend, but this usage is obsolete.

> **Commentaire [c4]:** Now incorporates definition from S-32.

Toponym: the name applied to a geographic feature, ~~a word or group of words constituting a place name,~~ eg: LONDON, *SKAGERRAK, DEUTSCHE BUCHT, ENGLISH CHANNEL, WEST HOYLE BANK,* SAINT JOHN'S CHURCH .

Generic term: describes a feature in terms of its characteristics and not by its proper name. It may

form part of a toponym, ~~that term in a legend or toponym which describes the type of geographic feature,~~ eg: *CHANNEL, BANK*, KLIFF, CHURCH.

Descriptive name: a toponym that uses words to describe the physical or some other characteristic of a geographic feature, eg: WEST, LILLE, ROTE.

Descriptive term: a word (usually a common noun, an adjective or a phrase), that designates a feature by its properties, but does not constitute a toponym, eg: airfield, canal, water tower, seasonal (for streams).

~~**Descriptive term:** a term in a legend or toponym used to describe the physical or some other characteristics of a geographic feature, eg: WEST, LILLE, ROTE.~~

Specific term: any part of a ~~legend or~~ toponym other than the generic term, eg: ENGLISH, LILLE, FISKE, SAINT JOHN'S, ROTE, WEST HOYLE. (Thus the specific terms of a toponym comprise the descriptive terms, if any, and the proper name or names.)

Simple toponym: a toponym containing no generic term, eg: LONDON, THE SOLENT, CASQUETS.

Compound toponym: a toponym consisting of a specific term and a generic term, or of a specific element consisting of more than one word, ~~which contains a generic term and may also contain one or more descriptive terms,~~ eg: *ENGLISH CHANNEL, LILLE FISKEBANK*, SAINT JOHN'S CHURCH, ROTES KLIFF, *WEST HOYLE BANK*.

Original form of a toponym (Endonym): a toponym designating a geographic feature situated in the territory under the jurisdiction of a sovereign state, in the form which agrees with the official or current usage of that state, eg: LONDON, ORKNEY ISLANDS, KØBENHAVN.

Exonym: name used in a specific language for a geographical feature located beyond the area where that language has official status, and differing in its form from the name used in the official language or languages of the area where the geographical feature is located, ~~a toponym used by one country to designate a geographic feature that lies wholly or partly outside the bounds of its national sovereignty, and which may be situated in territory under the jurisdiction of another state which uses a different original form,~~ eg: *ATLANTIC OCEAN*, ANTARCTICA, LONDRES, ILES ORCADES, COPENHAGEN.

Commentaire [c5]: DE: should 'Rote' here be 'Rotes'?

Commentaire [c6]: DE: should 'Rote' here be 'Rotes'?

Commentaire [c7]: S-4 must particularly address water areas, such as Atlantic Ocean. This UNGEGN definition does not fit, as there is no official language for the Atlantic Ocean (or indeed Antarctica). The original definition seems better – but may not be accurate. Is there another appropriate term? Or could we add 'if any' at the end. **Can NZ specialists advise, please.**

B-510   **LANGUAGE: GENERAL RULES**

B-510.1   **Two or more official languages.** Countries having two or more official languages may adopt double or multiple legends (including toponyms) on charts of their own territory. In charting the same territory, other states may retain the multiple legends or may choose one of the official forms.

B-510.2   A legend may be translated without retaining the original language version.

B-510.3   Not currently used.

B-510.4   **Language on charts.** English is the working language for navigational purposes and for communication at sea (SOLAS Chapter V Regulation 14 refers). See also B-122.

The XVth International Hydrographic Conference (1997) decided that:

> 'each Hydrographic Office which does not issue charts in the English language should give all legends on charts affecting its territorial waters in its national language and in English.' (Decision 9)

Consequent to this decision, English language versions of all notes should be included on all non-English charts. Navigationally significant legends should also be given in English, or if more convenient, listed in a glossary (key) on the chart. English language versions of notes and legends are particularly appropriate on charts used for international shipping. See also B-241 and B-242.4.

Commentaire [c8]: WG letter 05&07/2007 and IHO CL 82/07 and 76/08 refer

B-510.5   **Language on adopted charts.** Printer nations may translate any elements of adopted charts into their own national language, in whole or in part, or add to those elements such translations, explanations, annotations, etc. as they may deem appropriate. However, toponyms and international abbreviations should not be translated. Printer nations may add alternative forms to those of the producer nation.

B-510.6   **Glossaries.** If desired, printer nations may add partial glossaries to adopted charts in order to permit their user to understand the generic terms appearing in legends and compound toponyms on that chart without recourse to glossaries in associated publications or dictionaries.

B-520   TRANSLITERATION, ALPHABET, PUNCTUATION

If the national language in which a toponym is normally expressed does not use the same alphabet or script as that of the publisher nation, the toponym may be rendered into the latter's language by means of a transliteration or transcription system. ~~If an internationally approved system exists, it must be used; failing this a national system may be employed.~~ Various different transliteration systems exist, including UNGEGN, ISO 9:1995 and regional systems such as Russia's ГОСТ (transliterated GOST) and BGN/PCGN (US Board on Geographic Names/UK Permanent Committee on Geographical Names). HOs may be subject to national government requirements on which system is used for charts.

Note: Among countries where the Roman alphabet is official, international uniformity in transcription systems would be advantageous to the various national governments. It is accordingly recommended that national Hydrographic Offices place before their governments the desirability of obtaining uniformity and urge the continuation of efforts for effective agreements through the United Nations.

B-521(I)   ROMAN ALPHABET ON INTERNATIONAL CHARTS

The following rules are intended to standardize and simplify the Roman alphabet used on international charts as much as possible, for the benefit of printer nations and users. In the case of nations which do not use the Roman alphabet, alternative forms of toponyms (transliterated using the Roman alphabet) and legends (translated into English, in accordance with B-510.4) should be shown, in addition to showing them in the national alphabet.

B-521.1(I)   The Roman alphabet used on international charts comprises the 26 letters of the basic Roman alphabet, augmented if necessary by the special letters, or the letters modified by diacritical marks, particular to certain languages. The use of special (non-Roman) letters should be avoided where possible, for example if the language concerned allows the substitution either of groups of letters of the basic Roman alphabet or of letters of the basic Roman alphabet modified by diacritical marks.

B-521.2(I)   Accents and diacritical marks must normally be retained, unless the rules of the language permit them to be dispensed with. A letter of the basic Roman alphabet with diacritical mark should always be used in preference to a special (non-Roman) letter.

B-521.3(I)   The standard alphabetical order, eg as used in glossaries (see B-510.6), should be derived from the usual order of the basic 26-letter Roman alphabet. The order of words in an alphabetical list must be unaffected by the presence of accents or diacritical marks. Special (non-Roman) letters may be placed after the basic alphabet, or incorporated into appropriate places in the basic order, according to usual national practice.

B-522   PUNCTUATION AND OTHER MARKS

Punctuation (eg in cautionary notes) should conform to the convention~~als of the language being used.~~ ~~English practice.~~

Non-alphanumeric symbols representing units (eg: °, ′, ″) and other universally recognized marks (eg: &, +, @, ©, §) may be used on charts ~~(eg: &, +, @, ©, §)~~. Uncommon or special marks having meanings particular to charts should be explained in national versions of INT1 (eg: ≠, #).

Commentaire [c9]: Following remarks from FI and DE, it is clear that the existing sentence is untenable. S-4 is not the place to resolve difficult standardization issues beyond the control of HOs (ie subject of national requirements). The drafted replacement sentence is intended to give a taste of the possible complexities.

Commentaire [c10]: From TR 8/1919. NZ suggests adding - Technical reference manual for the standardization of geographical names. This seems inappropriate in S-4 and is not part of the resolution which we are reflecting here.

B-530   **NUMBERS**

All numbers should be in Arabic numerals, except for those forming an integral part of compound toponyms, which must be spelled in full, eg Les Sept Îles, *Three Kings*. Roman numerals may be used for the numbering of paragraphs, sub-paragraphs, and columns, eg in the title and notes, tables and outside the chart border. ~~whether in the title, in texts outside the title, or in tables.~~ Roman numerals may also be used in compound toponyms, eg King George V Land.

B-531   **FRACTIONS AND DECIMALS**

Fractional values should be expressed in decimal form.

The decimal part of a sounding or drying height should be indicated by a subscript figure, with no decimal separator. Where other decimal parts are shown, eg bearings, positions, tidal heights, dredged depths, the decimal separator should be used according to national practice (comma, decimal point or full stop – comma is the preferred ISO sign).

The natural scale should be expressed as a ratio, eg 1:200 000 (see B-241.4).

B-540 **ABBREVIATIONS**

B-540.1 **International abbreviations** are listed at B-122.1. For those terms for which an international abbreviation exists, full words and differing national abbreviations should not normally be used, except in toponyms. However, full words may be used in the chart title, tables and notes.

B-540.2 **Abbreviations** should not be used within compound toponyms except where necessary, eg because of lack of space. Where such abbreviations are necessary, national abbreviations may be used irrespective of the existence of a corresponding agreed international abbreviation.

B-540.3 **Abbreviations and the use of full stops.** International abbreviations should not be terminated by full stops, except where forming the generic part of a toponym or for separating seabed qualities (see B-425.9) and light descriptions (see B-471.9). Abbreviations of national generic terms in toponyms should be terminated by full stops in order to indicate clearly to chart users, especially those speaking languages other than that used on the chart, that the abbreviation is not a full (unfamiliar) word. Full stops should also be used for other national abbreviations.

B-550   **TOPONYM**S: Y   **GENERAL RULES** ~~FOR GEOGRAPHICAL NAMES~~

B-550.1   **Toponyms: Principle of selection.** A toponym should serve an identifying or a reference function for the chart user. It may also be required to identify features mentioned in other nautical publications.

B-550.2   **Consistency of toponyms.** Chart producers must ensure agreement on toponyms ~~toponymy~~ among charts of different scales and between charts and other nautical publications.

B-550.3   From Resolution 8/1919 (as amended): To obtain approximate uniformity in geographical names appearing on the nautical charts (and other nautical documents) of maritime countries, each national Hydrographic Office should apply the following general rules:

> a)   **Own coastal areas.** On its charts of its own coastal areas, show names that are in exact agreement with the forms prescribed by the most authoritative source. Each country will thus provide complete and authoritative name coverage in its own official script, whether Roman or non-Roman, for the use of all other national Hydrographic Offices that issue charts on various scales, and other nautical documents, for the same area.
>
> b)   **Foreign coastal areas (Roman script).** On its charts of foreign coastal areas where the Roman script is officially used by the sovereign country, show names that are in exact agreement with the most authoritative usage of the country having sovereignty. These names should be obtained directly from new and revised editions of the nautical charts and other documents of the country having sovereignty or confirmed by correspondence with that country. Where such names as officially written use accents or diacritical signs, these should be retained, including when names are printed in capital (upper case) letters.
>
> c)   **Foreign coastal areas (non-Roman scripts)**. On its charts of foreign coastal areas where the script of the sovereign country is other than the Roman script, show names that are obtained by applying the various international systems for romanization approved by the United Nations to the names appearing on the most authoritative sources of the country having sovereignty or confirmed by correspondence with that country. See also B-520.
>
> d)   **Generic parts**. On its charts of all foreign coastal areas, the generic parts of complex toponyms should (in its Roman-alphabet form) be the same as the country having sovereignty, eg Falsterborev, *Baie de Seine.* By following this practice, the geographical generic term will not be translated but will appear, in its Roman-alphabet form, on the charts of all nations.
>
> e)   **Names of major features.** On all its non-International charts, apply its conventional national usage to names of countries, major territorial divisions and boundary features, and to the oceans and their international subdivisions. The names used internationally may also be shown but in a subordinate manner. This system will be applied until an international convention by the United Nations on standardization of internationally recognized names has been adopted. See B-552 for International charts.

B-550.3 (simplified alternative)

> To ensure consistency of toponyms appearing on official charts, the following general rules apply (condensed from Resolution 8/1919):
>
> a)   On its charts of its own territory (land and sea), a national Hydrographic Office must show names as prescribed by the most authoritative source, in its own official script.
>
> b)   Where names are in Roman script, other hydrographic offices should show names (including generic parts of names) in agreement with the charts and publications of the national hydrographic office of the country having sovereignty, including all diacritical marks.

Commentaire [c11]: Remove reference and cancel TR on publication.

Commentaire [c12]: Added for sense

Commentaire [c13]: Following Res 8/1919 we attempted to avoid terms which imply legal jurisdiction eg territorial sea. However, 'coastal areas' seemed better than just 'coasts', by including the land and waters adjacent to the coast.

Commentaire [c14]: DE suggests 'Home waters' instead of 'Own coastal areas'. However, names on land are also included, hence use of the term 'coastal areas' to cover land and water (see original comment above). Similarly, NZ suggests 'Territorial Sea' – see above.

Commentaire [c15]: SE asked for a simplification of the Res 8/1919 rules. Please advise whether we should retain the 8/1919 rules as above, or work with this simplified version (but still cancel 8/1919).

c) Where the names shown on the charts of the national hydrographic office of the country having sovereignty are not in Roman script, other hydrographic offices should transliterate or transcribe the names according to the rules of their national government; see B-520.

d) Exceptionally to the above general rules, a hydrographic office may apply its conventional national usage to names of:
- countries
- major territorial divisions and boundary features (eg mountain ranges, deserts extending through more than one sovereign state)
- oceans
- water areas which are not confined within one nation's territorial waters.

See B-522.2(I) for special rules applying on International charts.

B-550.4 **Alternative and obsolete forms.** If a nation is charting an area in which the original toponyms are not in that nation's own language, it may add to an original form an exonym or former name if it considers that, without the addition, confusion could occur. The alternative form should be shown in a font and/or point size which is both different from and subordinate to that of the original toponym.

B-550.5 **Distinction between descriptive terms and toponyms**. On charts of foreign coasts, toponyms should not be translated, in accordance with B-550.3b-c. Descriptive terms should be translated, if they are not the generic part of a toponym, but it is not always easy to distinguish which legends are toponyms and which are descriptive terms. The use made of the information by the mariner may provide a guide:

- If the requirement is to know the function of a feature for navigational purposes, eg *Puerto pesquero*, it is a descriptive term and should be translated.

- If it is required for reference, eg *Vorhafen*, it requires a distinctive designation and should be treated as a toponym and not translated. However, a translation of the generic term may be included in a glossary on the chart (see B-510.6), in the index of abbreviations in the national version of INT1 or in an associated publication.

Descriptive terms should be reduced to a minimum by the use of symbols wherever possible, eg, use of symbol F10 instead of descriptive term 'Fishing Harbour'.

B-551 **TOPONYMS: REFERENCES AND AUTHORITIES; INTERNATIONAL AND NATIONAL**

B-551.1 **International references.**

a. The most important international reference for limits (but not names) of sea areas is:

- **IHO S-23 'Limits of Oceans and Seas'.** This names and defines the exact limits of the world's oceans, seas and major gulfs and straits, for the convenience of hydrographic offices when compiling charts and nautical publications. Generic terms are in English only.

b. The most important international references for names of undersea features are:

- **IHO B-1 'General Bathymetric Chart of the Oceans (GEBCO)'.** A series of eighteen separate sheets covering the world and one World sheet. The most recently printed copy of the latest edition should be used.

- **IHO B-6 'Standardization of Undersea Feature Names'.** This IHO-IOC publication has been published through collaboration between the Joint IHO-IOC Guiding Committee for GEBCO and the United Nations Group of Experts on Geographical Names. It is intended to ensure maximum international standardization of the names of undersea features, and includes in particular Guidelines for naming features, a name proposal form and a list of terms and definitions.

> **Commentaire [c16]:** It is misleading to describe S-23 as an 'authority' for names – it is not. As the title suggests, its purpose is to define the limits of various sea areas; how those areas are named on a nation's cartographic products will depend on the national policy of each country.
> (Jonathan Marshall, UKHO Geo Names advisor)
> See also B-550.3e and B-552.1.

- **IHO B-8 'Gazetteer of Geographical Names of Undersea Features'.** Gazetteer of Geographical Names of Undersea Features shown on the GEBCO sheets, on the small scale international (INT) chart series, on the sheets of the Regional International Bathymetric Chart projects or of significance to charts at small scale. Proposals for new names should be checked first against any published gazetteers and then submitted for clearance, either to the appropriate national authority or, where no such authority exists, to the IHB or IOC for consideration by the GEBCO Sub-Committee on Undersea Feature Names (SCUFN), which may advise on any potentially confusing duplication of names.

The IHO website should be consulted for the date of the most recent edition of the publications detailed above. Go to http://www.iho.int/iho_pubs/IHO_Download.htm See also 'Data and products' at www.gebco.net.

B-551.2 **Routeing measures.** For the naming of routeing measures (as specified in IMO publication Ships' Routeing) which may not conform to official names, see B-435f.

> **Commentaire [c17]:** We need to add a clarification at B-435f such as: Where reference names in authoritative documents, eg in IMO's publication 'Ships' Routeing', do not conform with the official names used by the sovereign state, these reference names may be shown on charts, specifically linked to the feature they are referencing, to assist the chart user.
> NB: approved by WG members in response to Letter 3/13.

B-551.3 **National authorities.** Most nations have set up a permanent or semi-permanent body responsible for determining toponomy on national mapping and charting. It is particularly important that nations ensure that toponyms on charts of their own territory are in accord with forms authorized by these bodies.

B-551.4 **Non-national waters.** The national bodies will give advice on the existence of official toponymy in other states and may be able to specify maps or other official publications or sources of toponyms for topographic and major sea features. It is possible in such cases, or if no national geographic names body exists, that there will be no official forms of toponyms of undersea and minor sea features. If so, charts of the area will probably have been produced by other hydrographic offices (which may have made hydrographic surveys in the past) and they should be used or adapted until official forms of toponymy are assigned to such features.

B-552 **TOPONYMS: INTERNATIONAL CHARTS**

B-552.1(I) **General.** Agreed international forms must be used for the names of topographic features of continental or international extent and the names of oceans, seas, arms of the sea and major gulfs. If such forms do not exist, the form in common maritime use by the producer nation should be used. Alternative names may be added if the printer nation considers it useful to do so.

B-552.2(I) **Countries.** Names of sovereign states should be given in the original form (see B-501) subject to the provisions of B-520 (Transliteration). The name used by the printer nation (exonym) may be added, if required, underneath, unbracketed and in a ~~font~~ text style and/or point size which is subordinate to the original form.

B-552.3(I) **Features marking or containing boundaries.** If adjacent states do not agree on the names of features (eg headlands, rivers) which mark an international boundary, or which contain an international boundary (eg bay, strait), both forms should be given, in the same ~~font~~ text style and point size.

B-560   TOPONYMS AND LEGENDS: CARTOGRAPHIC PRINCIPLES

In the context of this section, 'names' is used to include toponyms, descriptive terms and abbreviations.

The selection of names to be shown on a chart is an integral part of its design. Position, font, size, style, spacing and placement of names are also important to ensure optimum clarity.

A chart must carry all significant names according to its scale. Names should be included on the chart only if they have some significance for the mariner. Names may be used to emphasise features, but irrelevant names may interfere with, or distract from, the reading of essential information.

The insertion of names on charts should follow a number of well-established cartographic 'rules', most of which are consistent with other chart or map producing organizations. These rules are listed below, adapted to the specific case of nautical charts; if followed, they will significantly improve the clarity of the chart for the benefit of the user.

B-560.1   Placement and arrangment.

- Each name must clearly refer to the relevant object; ambiguity must be avoided. Therefore a name must not be separated from the object to which it relates and must not appear indefinitely between two objects to which it might refer.

- Letters must be evenly spaced. Spacing, if unduly wide, is difficult to read as a unit because of other detail; against a blank background, there is almost no limit to the spacing, but as a general guide it should not be more than 5 times the height of the letters.

- Interletter spaces are measured between the adjacent edges of letters, not between their centres.

- Where names or descriptions consist of more than one word in line, the spaces between words must be consistent and should be approximately three times the space between consecutive letters of a word.

- Care must be taken in the case of names describing a feature of considerable area or length.

- Care must be taken when placing names on water areas to ensure that channels, estuaries, harbour entrances, etc, are not obstructed by names. In most cases, it is better to place names of towns, headlands, etc, on the land rather than on the water.

- Where possible, to place the names of islands, lakes, large shoal areas, etc, on the features concerned rather than adjacent to them.

- Names and legends should be placed so that they do not break meridians and parallels unnecessarily or clash with detail in other colours.

- Names should not break the coastline unless unavoidable.

Examples of many of the rules governing the placement and arrangement of names are to be found on INT3 'Use of Symbols and Abbreviations'.
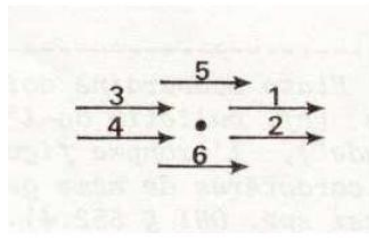
B-560.2   Straight or curved names.

- For maximum clarity, horizontal, straight names are usually preferred.

- Curved names tending to the horizontal are more readable than oblique straight names, except along linear features, see B-560.4.

- Curved coastal names should meet the coast nearly at right-angles. Where curved names are used, the curve must become more nearly horizontal as it moves away from the point named:
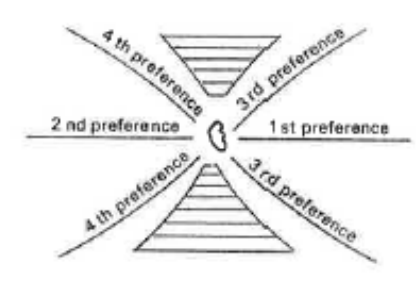
B - 500 . 11

A ——————⌒ B
          x
C ——————⌣ D
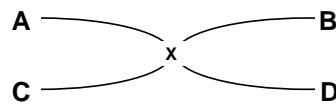
In the absence of other considerations curves B and C are preferred in the western part of the chart, A and D in the eastern part (for ease of reading from the centre of the lower border).

- Where the trend of the coast changes, adjacent curved names should be either parallel with each other, or gradually diverge.

- It is useful for a national HO to provide preference guidance to its compilers, while recognizing that other factors may dictate positioning, eg B-560.3 bullet 2 below. Here are some examples:

  o In the absence of other considerations curves B and C above are preferred in the western part of the chart, A and D in the eastern part (for ease of reading from the centre of the lower border).

  o This diagram provides preference for horizontal straight names:

  o This diagram covers straight and curved names:

B-560.3   **Point names and area names where the name cannot be fitted within the area.**

- Ambiguity must be avoided by placing names close to the symbols or areas they describe, without obscuring them.

- Land names should, if possible, be placed on the landward side of symbols so that lines drawn from seaward will reach the symbols first.

- Names of towns, islands and headlands should, if possible, be placed on the land. If they have to be placed on the sea, headland names must not obscure depths or other important detail close in to the headlands.

- At sea, channel buoy descriptions should, if possible, be clear of the fairway, and must leave space for flares where buoys are lit.

- A name or legend describing a point symbol should, if possible, start immediately right of, or end

immediately left of, the symbol. If a name cannot be placed immediately right or left of the symbol, the name may be placed above the symbol or, providing no detail is obscured, below it.

- Names and legends should be placed clear of radio circles, where that can be done without ambiguity.

- Consideration should be given to placing long names (consisting of more than two words) in two or more lines if they refer to a small feature. Names in two or more lines, such as the description of a light float, should be aligned vertically, justified on the side nearer the symbol or feature. The alignment of names of island groups, etc, occupying more than one line may, however, reflect the trend of the group rather than be left- or right- justified.

B-560.4   Names of Linear Features (eg rivers, canals, pipelines, ~~area limits~~) and along area limits.

- Names are generally better placed above linear features rather than under (as most English words have fewer descenders than ascenders in lower-case).

- For rivers, name a section where it bends least and is as horizontal as possible. Very exceptionally, a double curve may be acceptable for winding rivers.

- Names and legends associated with lines representing area limits must be parallel to the line and within the area which the limit defines rather than outside it.

- Names and legends associated with area limits which run north-south should be oriented so as to be~~described by legends which can~~ most easily be read from the bottom centre of the sheet: ie if a name must be vertical, it should read from south to north in the western half of the chart, north to south in the eastern half. If curved, some of it may ~~have to~~ be partly inverted if unavoidable. This may be illustrated thus:
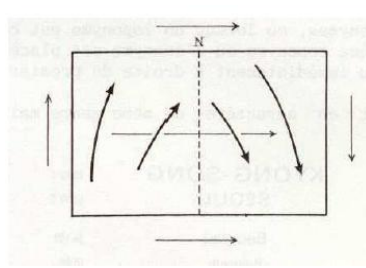
- Legends on arcs of light-sectors should be ~~above~~ outside the arcs, rightway reading from the bottom of the chart, ~~if possible~~ in accordance with the following diagram.
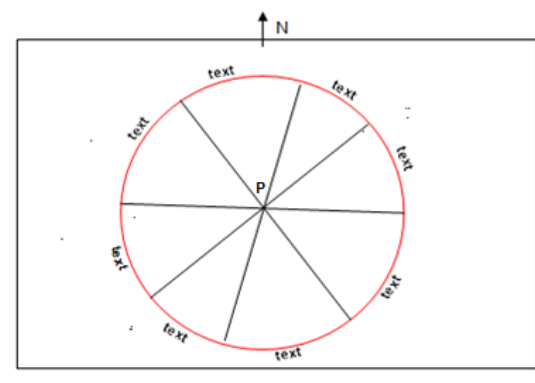
Where the arc is too narrow to contain the text along the arc, it should be rotated at right angles to the arc.

B - 500 . 13

B-560.5   Area names which can be fitted within the areas concerned.

- Area names must reflect the extent of the area but must not be so fragmented or open-spaced that the letters are difficult to associate.

- The reading of important fine detail within the area must not be obscured.

- There should always be a close relationship between point size, weight and spacing.

- Names should cross the centre of the area.

- If names are divided into more than one line, each line should consist of whole words.

- Lines should appear to be linked together; if there are three or more lines, the spaces between them must be equal.

- It is usually best for the lines to be centrally aligned rather than oblique.

- Where an area does not have charted limits:
    o the name should be spread along the longer axis of the area to show its extent.
    o The name of a mountain range or ocean ridge should follow the trend of the crest-line, although offset to allow portrayal.
    o The name of a bank should indicate the overall mass of the bank, not necessarily be confined by the shoalest contour. It may be preferable to offset the name of a bank to display a clear sounding pattern.
    o Exceptionally, names may be repeated over a large area with uncharted limits in order to suggest the extent.

- Where limits are charted:
    o the name should extend for more than half the length of the area.
    o A space should be left at each end of a name or legend of at least 1.5 times the inter-letter space; longer spaces at the ends are acceptable to avoid unduly wide spacing (see B-553.1).
    o The name of a strait takes the coastlines as its limits.
    o The name of a channel takes either coastlines or the banks which confines it as its limits.

B-561   TEXT STYLES AND FONTS

The choice of text styles and fonts (text styles or designs) is an integral aspect of nautical chart standardization and the creation of a homogeneous set of international charts. However, to require full standardization of text styles and fonts would be contrary to the overall principles followed in the IHO specification, ie use of the terms 'should' or 'may' where it is unlikely that variations from the recommended practice will be misleading, see B-110.

A certain degree of standardization is however required:

a) to achieve a reasonable level of compatibility between the charts of different nations, so that users moving from one to another will perceive no practical difference.

b) so that international or national charts can be adopted by nations with a minimum of change: it should be easy for printers to match fonts sufficiently closely that chart users will not to be confused by the differences.

B-562   FONTSTEXT STYLES: GENERAL PRINCIPLESRULES

Except for the title, explanatory and cautionary textual notes and marginalia (see B-563.3), the use of differing fonts on charts should satisfy the following general ~~principles~~rules:

a) A distinction should be made between geographic names referring to land features (including islets, above-water rocks, fixed marks, etc) and those referring to water features (whether on land or part of the sea).

b) A distinction should be made between those legends, words and abbreviations which relate to general or 'background' geographic information and those which relate to significant navigational information. The latter should be shown prominently while the former should be subordinated.

B-562.1   **Distinction between land and water names and legends**

Names and legends referring to land features should be in an upright (Roman alphabet) ~~font~~ style and those relating to water features in a ~~font~~style sloping to the right (*italic*). For features, eg pontoons, locks, which are difficult to define as either 'land' or 'water', see specifications for the appropriate feature (for these examples: B-324 Landing and Launching places and B-326 Docks).

B-562.2   **Distinction between general geographic and navigationally significant names and legends** should be achieved by making use of either different weights and sizes within a single font family (all based on the same design), or of different families, eg serif and sans-serif fonts, see B-563.4.

B-562.3   **Prominence of navigational information.** Font weights and sizes must be selected according to the relative importance of the various names and legends to be shown, whether general geographic or navigational. However it is important to ensure that navigational information predominates. Certain classes of features should, irrespective of their relative importance, be shown consistently in a particular size and weight of lettering. This applies particularly to such features as light descriptions and legends describing landmarks.

B-563   **CHOICE OF FONT**

The choice of font should be limited to a few, common families. If a single font style is used it should be a sans-serif family (see B-563.1), and if two font styles are used they should comprise one sans-serif and one serif family (see B-563.3).

To assist chart adoption by printer nations, fonts should be selected from those which are universely available, eg Univers (sans-serif), Times (serif).

B-563.1   **Use of sans-serif fonts.** If a single, sans-serif ~~style~~ font is used, navigationally significant features, eg landmarks, summit names and heights, aids to navigation, underwater hazards, should be differentiated by the use of bold style. See also B-340.

B-563.2   **Use of serified fonts.** If a serifed ~~style~~ font is used (in addition to the sans-serif font), its use should be restricted to the more important geographic names which are not navigationally significant features (see B-563.1)~~;~~. ~~m~~Minor non-navigation names and legends should be in light sans-serif style.~~ Navigationally significant features (see B-563.1) should be shown in sans-serif style.~~

B-563.3   **Title.** The choice of font used for the title, explanatory and cautionary notes and marginalia is left to national discretion.

B-564   **COLOUR**

Notes, legends, words, and abbreviations should be in the same colour as the items to which they refer. See B-140 for further guidance on the use of colour.

DRAFT REVISION OF S-4 SECTION B-500 ROUND 2

Response Form
(please return to CSPCWG Secretary by 21 May 2013)
andrew.coleman@ukho.gov.uk

Specification	Question	Yes	No
550.3 answer in one box only	Do you prefer the original version, based almost exactly on Resolution 8/1919, or		
	Do you prefer the simplified version which follows the original version?		
560.2	Are you content with the two additional graphics and supporting words?		
560.4	Are you content with the two additional graphics and supporting words?		
561 to 563	Are you content with the differentiation between text styles and fonts which we have adopted?		

Further comments:

Name:
Member State: