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CIRCULAR LETTER 46/2007
23 May 2007

SUBMISSIONS TO THE IMO SAFETY OF NAVIGATION (NAV) SUB-COMMITTEE

Reference: CL 42/2007 dated 26 April

Dear Hydrographer,

1 The IHB received replies to the CL at the Reference from: France, Japan, South Africa, Turkey and the United Kingdom. The comments made are included at Annex A and the final text of the submissions made to NAV 53 are at Annex B.

On behalf of the Directing Committee
Yours sincerely,

A handwritten signature in dark ink, appearing to be 'A. Maratos', written over a horizontal line.

Vice Admiral Alexandros MARATOS
President

Annex A: Comments

Annex B: Submissions to NAV 53

France:

In reply to CL 42//2007 dated 26 April 2007, France has no comments on the proposed submissions to the IMO NAV Sub-Committee taking into account the adoption of proposals 21 and 23 by the XVIIth IHC.

Note by IHB: Paragraph 9 of the submission on the "Evaluation of Electronic Navigational Chart (ENC) Availability" has been modified in accordance with the proposals adopted at the XVIIth IHC.

Japan:

In reply to CL 42/2007, Japan comments on paragraph 8 of "Development of comprehensive online catalogue of available official charts" are as follows:

We agree that it is neither practical nor economical that IHO maintains the catalogue of all globally available paper charts. We think, from users' point of view, it is preferable that they can obtain all necessary information through the catalogue on IHO's web-site. To solve these two points reasonably, we would like to propose that each HO prepare the catalogue of its paper charts on its web-site individually and that the IHO only play the role as the clearing house of paper chart information by means of linking from IHO's web-site to each of the HO's catalogue.

Note by IHB: This was also proposed by S Africa and paragraph 8 has been amended accordingly.

S Africa:

Regarding the draft document, "Development of a comprehensive online catalogue of available official charts", S Africa has the following comment.

I agree that an index of all globally available paper charts (par 8) will be difficult to compile, but under this section links can be created to the various HO websites where national chart catalogues can be viewed.

I believe this will satisfy the need to provide the mariner with information of all globally available paper charts.

Note by IHB: This was also proposed by Japan and paragraph 8 has been amended accordingly.

Turkey:

The Turkish Navy Office of Navigation, Hydrography and Oceanography (TN-ONHO) supports the draft papers which are prepared by IHB in order to be submitted to IMO NAV 53.

United Kingdom:

The UK has the following comments with regard to the draft submission on "Evaluation of Electronic Navigational Chart (ENC) Availability":

We suggest the deletion of the heading 'ENC Supply and Pricing' - as this only has relevance to paragraph 8.

Paragraph 8:

We believe that the statement in the first sentence appears too optimistic in that none of the ENC providers today are delivering truly integrated services and certainly they are unable to provide worldwide coverage. It should also be noted that neither UKHO nor NHS are 'companies'. Our preference is for this first sentence to be deleted. If this is not accepted then we would wish it to be amended to read: 'An increasing number of organisations are striving to deliver ENC services thereby providing the mariner with a degree of choice for a single source of available ENCs.'

Paragraph 9:

We suggest some additional wording at the start of the paragraph: 'The focus of IHO effort remains the provision of ENC datasets, harmonised for consistency, for all major ports and the routes between them. With this in mind and in the knowledge of the safety benefits provided by ECDIS, at the XVIIth International Hydrographic Conference held in Monaco in May 2007, IHO Member States adopted.....etc

Paragraph 11:

Add 'likely to be' prior to 'adopted' towards the end of the sentence

Note by IHB: These amendments are agreed and have been made to the submission.

SUB-COMMITTEE ON SAFETY OF
NAVIGATION
53rd session
Agenda item 5

NAV 53/5/x
XX May 2007
Original: ENGLISH

EVALUATION OF THE USE OF ECDIS AND ENC DEVELOPMENT

Evaluation of Electronic Navigational Chart (ENC) Availability

Submitted by the International Hydrographic Organization (IHO)

SUMMARY

<i>Executive summary:</i>	This document provides updated information on the availability of ENCs.
<i>Action to be taken:</i>	Paragraph 12
<i>Related documents:</i>	NAV 52/18 paragraph 6.19, and NAV 53/INF.3

Introduction

1 In its report to the Committee (NAV 52/18), the Sub-Committee at its fifty second session, concurred with the view of the IHO that the possibility of mandatory carriage requirements for ECDIS would lead to increased ENC production and requested the IHO to provide more detailed information to NAV 53.

2 The IHO requested information regarding ENC Production, Availability and Coverage from its Member States via IHB Circular Letters 71/2006 and 7/2007. The same questionnaire was sent to all IMO Member States under cover of IMO Circular Letter No. 2750.

3 The questionnaire requested information relative to 3 areas: routes operated by High Speed / Dynamically Stabilised Craft; International Shipping Routes; and Port Approach Routes / Major Harbours. The information was requested with respect to current availability, availability by July 2008 in the case of HSC and availability by July 2010 for all areas. Replies have been received from 57 States with France, Netherlands and the United Kingdom providing further information in relation to dependent territories and States for which they have a charting responsibility.

4 The IHO has also consulted the 2 Regional ENC Centres (RENCs) and the DNV Technical Report No. 2007-0304 on the "Effect of ENC Coverage on ECDIS Risk Reduction" commissioned by Denmark, Finland, Norway and Sweden and submitted to this session of the Sub-Committee as an information document (NAV 53/INF.3).

Summary of Results

5 The total number of ENC cells available to mariners in April 2007 was 6969 compared with 6079 in 2006 representing an increase of 14.6%. It is estimated that a further 2000 ENC cells have been produced but are not currently available to mariners.

6 The table below summarises States' replies to the questionnaire referred to in paragraph 3 above:

High Speed / Dynamically Stabilised Craft Routes
(35 States reported that HSC operated within their waters)

	Yes	Partial	No
Coverage now	12	14	9
By 1 July 2008	19	12	4
By 1 July 2010	30	2	3

International Shipping Routes

	Yes	Partial	No
Coverage now	25	29	20
By 1 July 2010	58	13	3

Port Approach Routes and Major Harbours

	Yes	Partial	No
Coverage now	21	34	19
By 1 July 2010	56	15	3

In order to resolve this matter the IHB is in contact with the 3 States that indicate no ENC coverage by 2010 and with 5 other States who have asked for assistance in speeding up their delivery of ENCs.

7 The DNV report acknowledges at section 3.4.3 that the IHO ENC Catalogue on which they base their study "will not be completely up-to-date" and that therefore "the results will tend to be conservative". They also indicate that "the additional coverage available by 2010 will presumably be considerably larger than what is currently planned or in production" and that this would also "introduce a conservative bias into the analysis and the results arrived at herein". The IHO agrees with these statements. The information given in the table above indicates that there will be a significant increase in the number of States with 100% coverage by 2010. The task of establishing exactly what ENCs are commercially available should be considerably improved with the advent of the new IHO online catalogue which is the subject of a separate submission to NAV 53 under this agenda item. The current catalogue, as used for the DNV report, requires a considerable amount of human intervention by every producer nation to maintain its currency whereas the new catalogue will collect the data, together with a significant amount of additional metadata, in a predominantly automated process.

8 During discussions at the IHO "ECDIS Stakeholders' Forum" meeting in 2006 some concerns were raised about the pricing of ENCs but more particularly with regard to the licensing regime. IHO Member States and the RENCs are investigating ways of reducing the cost to mariners through a more flexible approach to licensing.

9 The focus of IHO effort remains the provision of ENC datasets, harmonised for consistency, for all major ports and the routes between them. With this in mind and in the knowledge of the safety benefits provided by ECDIS, at the XVIIth International Hydrographic Conference held in Monaco in May 2007, IHO Member States adopted a new resolution on "ENC Coverage in relation to ECDIS Carriage Requirements" which includes:

"The IHO strongly supports the efforts by IMO to introduce mandatory carriage requirements for ECDIS, emphasising that:
A significant coverage of ENCs is already in place and will be further improved by 2010, as indicated in the DNV report and supported by IHO assessments, and secondly that:
Acceptance of mandatory carriage requirements will further accelerate the production of ENCs."

A further resolution on Electronic Navigational Chart Coverage, Availability, Consistency and Quality concludes that:

“IHO Member States should adhere and comply with the WEND Principles in order for the IHO to achieve adequate coverage, availability, consistency and quality of ENC’s by 2010.”

10 The IHO will continue to work with its Member States and, through its Regional Hydrographic Organizations and the IMO, with non IHO Member States to improve the availability and consistency of ENC’s worldwide and wherever possible to accelerate their production processes.

Conclusions

11 The figures provided in this document show that coverage is increasing steadily and it is the opinion of the IHO that there will be adequate coverage of consistent ENC’s by the time any further mandatory carriage requirements are likely to be adopted by the IMO.

Action requested of the Sub-Committee

12 The Sub-Committee is invited to take note of the information provided and take action as it considers appropriate.

SUB-COMMITTEE ON SAFETY OF
NAVIGATION
53rd session
Agenda item 5

NAV 53/5/xx
XX May 2007
Original: ENGLISH

EVALUATION OF THE USE OF ECDIS AND ENC DEVELOPMENT

Development of a comprehensive online catalogue of available official charts

Submitted by the International Hydrographic Organization (IHO)

SUMMARY

<i>Executive summary:</i>	This document provides updated information on the development of the IHO online catalogue of ENCs, RNCs and coastal States recommendations for the appropriate portfolio of paper charts to be carried as backup.
<i>Action to be taken:</i>	Paragraph 10
<i>Related documents:</i>	NAV 52/6/1, NAV 52/18, paragraphs 6.1 to 6.25 and IMO Circular Letter No. 2773

Introduction

1 The IHO reported to NAV 52 (NAV 52/6/1) on the status of the work undertaken to prepare a "Comprehensive online catalogue of available official charts" and sought comments / further guidance from the Sub-Committee on this matter.

2 The fifty second session of the Sub-Committee discussed this matter under agenda item 6 and reported its conclusions in section 6 of its report to the Maritime Safety Committee (MSC) (NAV 52/18).

Developments

3 The IHO has continued with the technical development of this online catalogue taking into account the comments and guidance provided by the Sub-Committee at its fifty second session.

ENCs

4 The primary function of the catalogue will be to show, in a graphical format, the coverage of all ENCs that are available to the mariner. It was concluded that the collection and inclusion of this data in the catalogue should require a minimum amount of human intervention. The cooperation of the two existing Regional ENC Centres (RENCs) and those States that publish ENCs but do not market them through a RENC are critical to the success of this catalogue. A meeting with representatives from the RENCs was held at the IHB in Monaco on 29 March 2007 and at which the technical solution and a work programme were agreed that is intended to have the catalogue operational before NAV 54 in 2008.

5 Work is currently in progress to establish the metadata requirements, product specification and business rules prior to the development of a "harvesting tool" which will extract the required information from the ENC files and reformat it as required for display in the catalogue.

RNCs

6 Other tools are being developed to allow the IHB to extract similar information from RNCs. The catalogue will only display RNC information in areas which are not covered by ENC's of an appropriate usage band.

Appropriate portfolio of paper charts (APC) required as back-up

7 As recommended by the Sub-Committee at its fifty second session (NAV 52/18 paragraph 6.23.3), the catalogue will show, where the information is available, coastal States' recommendations for the appropriate portfolio of up-to-date paper charts to be used as a backup in areas where ECDIS is operated in RCDS mode. The IHO has requested this information from coastal States through IHB Circular Letter 4/07 and IMO Circular Letter 2773. In these Circular Letters, the IHB also requested information regarding the APC required when a single ECDIS is operated with ENC's. Most States have not differentiated between the APC required when ECDIS is used in RCDS mode and when a single ECDIS is in use. At the time of preparing this document for NAV 53 the IHO has received responses from 25 coastal States, 24 of which are members of both the IHO and the IMO and 1 from a non IHO Member State.

Index of globally available paper charts

8 At its fifty second session (NAV 52/18 paragraph 6.23.4), the Sub-Committee included the proposal that the catalogue should include an index of all globally available paper charts. Having considered this matter the IHO considers, given the wide variety of formats in which the data is held and the ensuing maintenance of the catalogue, that this is neither a practical nor economic proposal. However the IHO catalogue will include a link to national online paper chart catalogues where these exist.

Conclusion

9 As stated in paragraph 4 above it is planned to have the catalogue operational in 2008 and the IHO will provide information on the status and operation of the catalogue to NAV 54.

Action requested of the Sub-Committee

10 The Sub-Committee is invited to:

- .1 take note of this information; and
 - .2 remind coastal States of the requirement to inform the IHO of their recommendations for the appropriate portfolio of up-to-date paper charts.
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