INTERNATIONAL HYDROGRAPHIC ORGANIZATION

ORGANISATION HYDROGRAPHIQUE INTERNATIONALE

CHART STANDARDIZATION & PAPER CHART WORKING GROUP (CSPCWG)

[A Working Group of the Committee on Hydrographic Requirements for Information Systems – CHRIS]

Chairman: Peter JONES
Secretary: Andrew HEATH-COLEMAN

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

Telephone:
(Chairman) +44 (0)1823 723343
(Secretary) +44 (0) 1823 337900 x 3656
Facsimile: +44 (0)1823 325823
E-mail: peter.jones@ukho.gov.uk
andrew.coleman@ukho.gov.uk

CSPCWG Circular Letter: 05/2005

UKHO ref: HA317/010/031-03 & HA317/004/013-03

To CSPCWG Members

Date 20 April 2005

Dear Colleagues,

Subject: Potential to develop M-4 as ISO Standard for Paper Nautical Charts

Reference: CSPCWG 1, Action 42: Secretary to seek to recover old CSC papers on previous discussions relating to including M-4 as ISO Standard, and distribute to the WG for information.

At CSPCWG 1, Australia tabled Information Paper No.2 (see List of CSPCWG/1 Documents on the CSPCWG page of the IHO website) regarding an International standard for paper charts. The record of the meeting states:

> *IHB advised that when this issue had been previously discussed (by CSC), no clear response had been received from ISO on the question of responsibility for maintaining M-4, if it were to become an ISO standard. AU suggested that it may be possible to register M-4 with ISO (as some S-57 documents already have been), without losing control of the document. The WG decided that this subject should be put forward for discussion by CHRIS.*

Andrew Heath-Coleman, our Secretary, has successfully located the Chart Standardization Committee's (CSC) papers relating to the IHO / ISO correspondence over adopting M-4 as an ISO Standard. These papers consist of old faxes and photocopies, some difficult to read and in a poor state for effective scanning and transmission. Andrew has therefore scanned them using Optical Character Recognition (OCR) software and then digitally edited the results to agree with the original documents. You will therefore note that logos and letter headings are missing. There are also references to other letters and documents not held by the CSC. The documents show the following exchanges:

I. The earliest document found in the CSC records is an approach to IHO dated in 1997 and is attached at Annex A. This approach to IHO was to 'allow IHO Publication M-4 to become an ISO Standard'. ISO also sought 'Category A' liaison between ISO and IHO. We have found no correspondence that explains what prompted this issue in ISO; however, a visit to the ISO website reveals an entry in the ISO/TC 8 Business Plan (Dated 2000-12-28) under 'Possible proposals for new work items':

This may indicate that the exchange had earlier origins in a request from IHO. ISO proposed that M-4 could become a draft International Standard with its maintenance managed through the assigned ISO Technical Committee. The meaning and implications of such maintenance is not clear but it may be implied that it is an administrative and procedural issue, not a technical review by ISO. However, the document would be required to be circulated within ISO under a 'coversheet' (detailing the scope, requirements etc) and a vote taken on its adoption.

II. The Chairman CSC summarized his view of the advantages and disadvantages, advising IHB (Annex B). The conclusion, as advised by Chairman CSC, and endorsed by the IHB responsible director, was that there was no merit in pursuing at the time. The issue does not appear to have received any wider consultation within IHO.

III. Accordingly, IHB replied to ISO based on this conclusion (Annex C).

IV. The final significant letter of this discussion was from ISO (Annex D), and still refers to a mechanism that comprises a 'coversheet document' for a 'fast-track endorsement procedure'.

V. The matter was also the subject of discussion at CSC 2, March 2000 (notes at Annex E refer). No further correspondence on the matter has been discovered, except for the distribution of the ISO papers to CSC members, in fulfillment of the CSC 2 Action 16a.1 (August 2000).

Provision of the above background information and of the annexed documents completes CSPCWG 1 Action item 42.

Having re-introduced this issue at CSPCWG 1, your views are now sought on whether CSPCWG should expend its resources on considering this matter. To assist, you may wish to refer to Annex B in order to answer the following questions (repeated as a response form at the end of this letter):

a) Are each of the listed advantages and disadvantages still relevant?

b) Are there additional issues to consider?

c) On balance, do you wish CSPCWG to add this issue to its Work Plan; and, if so, with what priority (high, medium, low)?

If the consensus is to pursue this matter, I will raise a proposal at CHRIS17 (Rostock, September 2005), in accordance with the decision of CSPCWG 1. It may be a significant task and have wide-ranging implications. I would be grateful if you would consider all these issues carefully, and return the completed response form (at Annex F) by 15 June 2005.

Yours sincerely,

Peter G.B. Jones,
Chairman

Annex A: Letter from Secretariat ISO/TC 8/SC 6 (JMSA) dated 21 April 1997 (with enclosures 1, 2.1 & 2.2)

Annex B: Letter from CSC Chairman to Director IHB dated 19 August 1997

Annex C: Letter from Director IHB to Secretariat ISO/TC 8/SC 6 (JMSA) dated 2 November 1997

Annex D: Letter from ISO Central Secretariat dated 06 August 1998

Annex E: Extract from CSC 2 (March 2000) notes

Annex F: Response form

ANNEX A

JAPAN MARINE STANDARDS ASSOCIATION (JMSA)
Address : 3-8 Meijiro 1-chome, Toahime-ku Tokyo 171 Japan
Telefax : + 813 3984 8994 e-mail : jmsafuku@mxg.meahnet.or.jp

to: Mr. RAdm Giuseppe Angrisano
Director, IHB
(+377 93 25 20 03)

from: S. Arikawa
our reference: JMSA 97 - 016
date: 97 - 04 - 21

your reference:
your letter of:

total pages: 7 (Please contact us if message is incomplete at Fax + 81 3 3984 8994.)

Subject: ISO Standard for the navigational charts

Dear Mr. Angrisano,
As we informed you by our fax (JMSA 96-158) of Mar. 25, 1997, the ISO/TC 8/Advisory Group meeting was held in Charlottenland (Denmark) on Apr. 3 and 4, 1997.
From the results of the meeting with regard to the subject matter, it is recommended that as shown in the attached 'Recommendation 107 on an ISO standard for navigational charts', ISO/TC 8/SC 6 communicate with IHO as early as possible and follow the necessary procedure to rapidly allow 'IHO Publication M-4' to become an ISO standard.

Under these circumstances, it is necessary, first of all, to obtain the agreement of IHO on allowing 'IHO Publication, M-4' to become an ISO standard (see ISO/IEC Directives G.2.1.1). Therefore, we ask you to make a special effort concerning this matter.

When the agreement of IHO has been obtained, we will move forward with the work in the following manner.

As a result of deliberation on the contents of Recommendation 107, the secretariat of ISO/TC 8/SC 6 considers that the best method would be to allow the secretariat of ISO/TC 8/SC 6 to become the proposer referred to in ISO/IEC Directives G.2.1.1, and to proceed with the work in accordance with the 'Fast-track procedure'.

In the process of the work concerned, it is necessary to establish category A liaison between IHO and ISO-bodies (ISO/TC 8 and ISO/TC 8/SC 6). To do this well, we are going to make necessary arrangements via the ISO Central Secretariat.

As it is requested that rapid preparation of ISO standards be made, the secretariat of ISO/TC 8/SC 6 wishes to obtain IHO Publication M-4 as quickly as possible. Please send it to us.

Looking forward to having your prompt response.

Yours sincerely,

S. Arikawa
The secretariat of IS0/TC 8/SC 6
Managing director
Japan Marine Standards Association
(JMSA)

Encl. 1. ISO/TC 8 AG N 494 Recommendations 24th meeting ISO/TC 8/AG (Recommendation 107 on an ISO Standard for navigational charts)
2. ISO/IEC Directives: 1.15 & G.2

ISO/TC 8 AG N 494

Recommendations 24th meeting ISO/TC 8

Charlottenlund (Denmark), 1997-04-03/04

[CSPCWG Secretary's Note: the original document included recommendations 104-106 and 108-112, but these have not been copied, as they are not relevant to M-4]

Recommendation 107 on an ISO standard for navigational charts

The ISO/TC 8 Advisory Group recommends that ISO/TC 8/SC 6 proceed as soon as possible with the subject 'Navigational chart' by proposing a new work item based on IHO publication M-4 and to submit a draft for comments in the most appropriate and speedy way in consultation with IHO. The secretariat of ISO/TC 8/SC 6 is requested to give a status report to the chairman for ISO/TC 8/SC 7 for a period of 6 years (1997-2002).

1.15 Liaison with other organizations

1.15.1 The desirability of liaison between a technical committee or subcommittee and other international or broadly based regional organizations working or interested in similar or related fields shall be taken into account at an early stage of the work.

1.15.2 The two categories of liaison are the following.

-- **Category A**: Organizations which make an effective contribution to the work of the technical committee or subcommittee for questions dealt with by this technical committee or subcommittee. Such organizations are sent copies of all relevant documentation and are invited to meetings by the office of the CEO.

-- **Category B**: Organizations which have indicated a wish to be kept informed of the work of the technical committee or subcommittee. Such organizations are sent reports on the work of a technical committee or subcommittee by the office of the CEO.

1.15.3 Liaisons are established by the Chief Executive Officer in consultation with the secretariat of the technical committee or subcommittee concerned. They are centrally recorded and reported to the Technical Management Board.

1.15.4 In order to be effective, liaison must operate in both directions, with suitable reciprocal arrangements.

1.15.5 Technical committees and subcommittees shall seek the full and, if possible, formal backing of the organizations having A-liaison status for each International Standard in which the latter are interested.

G.2 **'Fast-track procedure'**

G.2.1 Proposals to apply the fast-track procedure may be made as follows.

G.2.1.1 Any P-member and any category A liaison organization of a concerned technical committee may propose that an existing standard from any source be submitted for vote as a draft International Standard. The proposer shall obtain the agreement of the originating organization before making a proposal. The criteria for proposing an existing standard for the fast-track procedure are a matter for each proposer to decide, but proposals falling within the scope of technical committees other than IS0/IEC JTC1 and ISO/TC 184 shall be submitted to the Technical Management Board for prior approval.

G.2.1.2 An international standardizing body recognized by the ISO Council may propose that a standard developed by that body be submitted for vote as a final draft International Standard.

G.2.2 The proposal shall be received by the Chief Executive Officer, who shall take the following actions:

a) settle the copyright and/or trademark situation with the organization having originated the proposed document, so that it can be freely copied and distributed to national bodies without restriction;

b) for case G.2.1.1, assess in consultation with the relevant secretariats which technical committee/subcommittee is competent for the subject covered by the proposed document; where no technica1 committee exists competent to deal with the subject of the document in question, the Chief Executive Officer shall refer the proposal to the Technical Management Board, which may request the Chief Executive Officer to submit the document to the enquiry stage and to establish an ad hoc group to deal with matters subsequently arising;

c) ascertain that there is no evident contradiction with other International Standards;

d) distribute the proposed document as a draft International Standard, (G.2.1.1), or as an FDIS (G.2.1.2), indicating (in case G.2.1.1) the technical committee/subcommittee to the domain of which the proposed document belongs; in the case of particularly bulky documents, the Chief Executive Officer may request the necessary number of copies from the proposer.

G.2.3 The period for voting and the conditions for approval shall be as specified in 2.6 or 2.7, except that the voting period on an FDIS submitted in accordance with G.2.1.2 shall be five months. In the case where no technical committee is involved, the condition for approval of a draft International Standard is that not more than one-quarter of the total number of votes cast are negative.

G.2.4 If the conditions of approval are met, the document shall progress to the approval stage (2.7) in the case of a DIS or to the publication stage (2.8) in the case of an FDIS. If not, the proposal has failed and any further action shall be decided upon by the technical committee/subcommittee to which the DIS was attributed in accordance with G.2.2 b), or by discussion between the originating organization and the office of the CEO if no technical committee was involved.

If the standard is published, its maintenance shall be handled by the technical committee/subcommittee to which the document was attributed in accordance with G.2.2 b), or, if no technical committee was involved, the approval procedure set out above shall be repeated if the originating organization decides that changes to the standard are required.

ANNEX B

[CSPCWG Secretary's note: Text of letter from Peter Cox (Chairman CSC) to Rear Admiral Angrisano (Director IHB), dated 19 August 1997.]

Dear Giuseppe

ISO Standard for Navigational Charts

In June at our discussion in Istanbul you asked me to look at and comment on the correspondence you have had with Mr Arikawa of the Japan Maritime Standards Association concerning the possibility of IHO Publication M-4 becoming an ISO standard. I apologise for the delay in reply.

I have looked at the correspondence and would make the following points:

1. M-4 is already compiled and is likely to require very little effort over and above normal maintenance to render it suitable as a standard (but note Disadvantage 4 below).
2. Standards for International Charts would have international maritime acceptance and would encourage new member states of the IHO to bring their charting in line. However, I am not aware that any marine bodies question the authority of official paper charts anyway.
3. In recent years, with the continuing discussion of performance standards for digital chart products, some have begun to question whether there should be a performance standard for paper charts. At first sight, the approval of M-4 as a standard might be thought to solve this problem. However, M-4 is a construction standard for International Charts not a performance standard and so would have no real bearing on this debate.

Disadvantages

1. M-4, as mentioned above, is not a standard for all navigational charts. It is a construction standard for International Charts. *[CSC Secretary's manuscript note – 'this is not the case - M-4 provides specifications for national and international charts -see B-102']*
2. IHO member states who do not produce national charts in conformance with M-4 may feel that they are being pushed into doing so as a result of the wider circulation of M-4. Furthermore, charts produced by member states which do not conform to a greater or lesser extent might be deemed as not being charts for legal purposes.
3. There is an implication in the 'Fast Track Procedures' that the IHO might lose control of the updating of M-4 if it became an ISO standard since all amendments would have to be reviewed by the ISO technical committee (See G.2.4 paragraphs 2 and 3 *[CSPCWG Secretary's note April 05: at Annex A to this CL refers, but there was no paragraph 3 in the document found]*). This would be unlikely to be acceptable to member states of the IHO and would be very cumbersome to operate.
4. It is possible that the level of latitude to use alternative solutions inherent in M-4 may not be deemed acceptable for an ISO standard.

In my view the disadvantages outweigh the advantages and there is no compelling case to go ahead with this approach.

ANNEX C

INTERNATIONAL HYDROGRAPHIC BUREAU

4, Quai Antoine 1er
B.P. 445 - MC 98011 MONACO Cedex
PRINCIPAUTE DE MONACO

IHB File S3/4405

2 November 1997

Mr. S. ARIKAWA
Secretariat of ISO/TC8/SC6
Managing Director
Japan Marine Standards Association (JMSA)
3-8 Mejiro 1-chome,
Toshima-ku Tokyo 171
Japan

Dear Sir,

Please accept our apologies for the lateness of this reply. Summer holidays and the turn over on 1 September of the IHB Directing Committee have delayed IHB consideration of your letter of 14 August.

After consultation of the Chairman of the IHO Chart Standardization Committee, which is tasked to maintained the IHO Chart Specifications contained in Publication M-4, it has appeared to us that the disadvantages for having an ISO Standard for M-4 seem to outweigh the advantages and that there is therefore no compelling case to go ahead with this approach. The reasons put forward were the followings:

- M-4 is a construction standard for international charts rather than a standard for all navigational charts.
- IHO Member States who do not produce national charts in conformance with M-4 may feel that they are pushed into doing so as a result of the wider circulation of M-4.
- There is an implication in the 'Fast Track Procedures' that the IHO might loose control of the maintenance of M-4 if it became an ISO Standard since all amendments would have to be reviewed by the ISO technical committee. This would be unlikely to be acceptable to IHO Member States and would be very cumbersome to operate.
- It is possible that the level of latitude to use alternative solutions inherent in M-4 may not be deemed acceptable for an ISO Standard.

In brief, it seems premature to propose M-4 as an ISO Standard. The debate may however be reopened later. Thank you for the support you have expressed in the matter and, again, apologies for our slowness in reacting to your letters.

On behalf of the Directing Committee
Yours sincerely,

Commodore Neil Guy, Director

Telefax: (+377) 93.10.81.40
Telex: 479164 MC INHORG
Telephone: (+377) 93.10.81.00
Internet e-mail: info@ihb.mc
Web: www.iho.shom.fr

ANNEX D

ISO Central Secretariat
our date 1998-08-06
our reference ISO/TC 8

Mr. G. Angrisano
Director
International Hydrographic Bureau
Avenue President J. F. Kennedy 7
B.P. 445
98011 MONACO CEDEX
Principaute de Monaco

Dear Mr. Angrisano,

IHO Chart specifications, Publication M-4

The subcommittee ISO/TC 8/SC 6 has informed me that they are very interested in adopting the above publication as an ISO International Standard.

It is, however, recommended not to repeat or duplicate the work already done by the IHO Chart standardization committee. Therefore, I would like to review the possibility of using an endorsement procedure by means of the issue of a coversheet document. An example of such an ISO publication is enclosed for your reference (see ISO 7137:1992). *[CSPCWG Secretary's April 05 note: not held in CSC papers – this is an aircraft standard]*

Having reviewed a suggestion in the third paragraph of your letter dated 24 February 1997 *[CSPCWG Secretary's April 05 note: this letter is not held in CSC papers]* and knowing the views of ISO/TC 8/SC. 6, it appears to me that such a procedure could be acceptable both for IHB and ISO.

As a first step, I have to establish a draft ISO coversheet document and will therefore need a copy of the relevant IHO standard in the English language as well as in the French language, if available. I would be very grateful if you could provide me with a copy of the IHO publication and then, if you agree, we will review and discuss the procedure to be followed. *[CSPCWG Secretary's April 05 note: CSC papers include a 'thank you note' for receipt of a copy of M-4, as requested].*

Yours sincerely,

F Abram
Technical Programme Manager
Standards Department

cc. Capt. C. H. Piersall, Chairman of ISO/TC 8 (without enclosure)
Mr. S. Arikawa, Secretary of ISO/TC 8/SC 6 (without enclosure)

FA/ds/ CS982160.043

INTERNATIONAL ORGANIZATION FOR STANDARDIZAT10N
Postal address Office address Telephone Telefax + 41 22 733 34 3
Case postale 56 1, rue de Varembé national(022) 749 01 11 Telex 41 22 05 iso ch
CH-1211 Genève 20 Genève - Switzerland international + 41 22 749 01 11 Telegrams isorganiz

Extract from CSC 2 (March 2000) notes

16a. M-4 as an ISO standard

IHB [Michel Huet] outlined the approach they had received from ISO/TC8 over the possible adoption of M-4 as an ISO Standard. Copies of correspondence were provided [and will be circulated to all CSC members]. The IHB had referred the letter to the CSC Chairman for comment who concluded that the disadvantages of adoption as an ISO standard outweighed the advantages.

The main advantages would be to provide visibility to M-4 and to encourage new members of the IHO to bring their charting into line with it. M-4 is a construction standard for all navigational charts, and, as it is already compiled, is likely to require very little additional effort other than normal maintenance to render it suitable as a standard.

The main disadvantage is that there is an implication in the 'Fast Track Procedures' [see correspondence] that, if M-4 became an ISO standard and all amendments had to be reviewed by the ISO technical committee, the IHO might lose control of the updating of M-4. This would be unlikely to be acceptable to IHO Member States and would be very cumbersome to operate. IHB want to be custodian of the standard and have not yet received assurance that this is so. Another disadvantage is that IHO Member States who do not produce national charts in conformance with M-4, may feel that they are being pushed into conformance by the wider circulation of M-4. Charts produced by Member States which do not conform, might be deemed for legal purposes not to be charts. It is also possible that the present options in M-4 to use alternative solutions may not be acceptable for an ISO standard.

ISO seems superfluous for M-4; it is more appropriate for S-57, given the level of competition in digital charting from the private sector. ISO TC211 is the base standard currently being looked at to make S-57 ISO [although TSMAD were initially opposed to this]. The Chairman wondered whether it would be acceptable for M-4 not to be ISO, if S-57 was ISO.

IHB [Tony Pharaoh] raised the question of whether, if M-4 did become ISO, whether IHO or ISO edition would be authority and whether IHO Member States would have access free of charge.

UK commented that from a national point of view, they were not sure of any advantages. Germany and India had achieved ISO 9000 accreditation, without M-4 being ISO.

IHB [Michel Huet] commented that the benefit of M-4 being ISO standard was not clear and suggested that IHB should reply to ISO saying that they were still waiting for Cover sheet and that there was no support for the proposal, unless they can say what the benefit is to IHB.

ACTION 16a.1: CSC Secretariat to circulate papers provided by IHB [Michel Huet] to CSC members. ***Post meeting note****: Action 16a.1 completed. Copies of ISO papers sent out to members 1 August 2000.*

ACTION 16a.2: IHB to reply to ISO saying that they were still waiting for the Cover sheet and that there was no support for M-4 becoming ISO, unless ISO can identify benefits to IHB.

ANNEX F

Potential to develop M-4 as ISO Standard for Paper Nautical Charts

Response form

(please return to CSPCWG Secretary by 15 June 2005)

andrew.coleman@ukho.gov.uk

1. Are each of the advantages and disadvantages listed in Annex B still relevant? Please tick the boxes in the table below to record your agreement or disagreement.

No.	Advantages	Agree	Disagree
1	M-4 is already compiled and is likely to require very little effort over and above normal maintenance to render it suitable as a standard (but note Disadvantage 4 below)		
2	Standards for International Charts would have international maritime acceptance and would encourage new member states of the IHO to bring their charting in line. However, I am not aware that any marine bodies question the authority of official paper charts anyway		
3	In recent years, with the continuing discussion of performance standards for digital chart products, some have begun to question whether there should be a performance standard for paper charts. At first sight, the approval of M-4 as a standard might be thought to solve this problem. However, M-4 is a construction standard for International Charts not a performance standard and so would have no real bearing on this debate		
	Disadvantages		
1	M-4, as mentioned above, is not a standard for all navigational charts. It is a construction standard for International Charts. *[but see CSC Secretary's manuscript note – 'this is not the case - M-4 provides specifications for national and international charts -see B-102']*		
2	a. IHO member states who do not produce national charts in conformance with M-4 may feel that they are being pushed into doing so as a result of the wider circulation of M-4. b. Furthermore, charts produced by member states which do not conform to a greater or lesser extent might be deemed as not being charts for legal purposes		
3	There is an implication in the 'Fast Track Procedures' that the IHO might lose control of the updating of M-4 if it became an ISO standard since all amendments would have to be reviewed by the ISO technical committee. This would be unlikely to be acceptable to member states of the IHO and would be very cumbersome to operate		
4	It is possible that the level of latitude to use alternative solutions inherent in M-4 may not be deemed acceptable for an ISO standard		

2. Are there additional issues to consider?

……
……
……..

3. On balance, do you wish CSPCWG to add this issue to its Work Plan? YES/NO
4. If so, with what priority? HIGH / MEDIUM / LOW

Name....…….

Member State……..……..