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3 July 2002

CHRIS Letter No. 5/2002

To: All CHRIS Members
Subject: 14th CHRIS Meeting, Shanghai, China, 15-17 August 2002
Ref: CHRIS Letter 3/2002, dated 16 May 2002

Dear Sir or Madam,

1. CHRIS Letter 3/2002 advised CHRIS Members that the 14th CHRIS Meeting would be hosted by the Chinese Maritime Safety Administration (MSA) in **Shanghai, on 15-17 August 2002** and that practical information on the Meeting, e.g. hotel reservations, would be provided on a special web page that MSA would set up.

This information is now available at www.shmsa.gov.cn:808-hw-ihoweb-14TH-CHRIS.htm, or www.hydro.gov.cn. Those who intend to participate in CHRIS-14 are therefore invited to consult this webpage, where online registration and hotel reservations can be made.

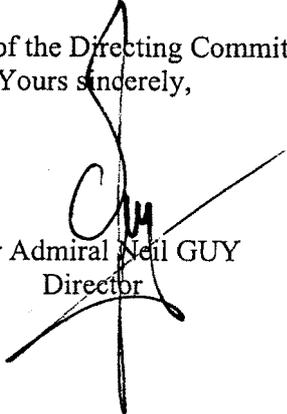
2. Decision No 12 of the 16th International Hydrographic Conference, Monaco, April 2002, states "The Conference decided that the CHRIS will consider the proposals put forward in PRO13 (Compilation scales for electronic data bases) and PRO 15 (Enhancement of the use of data at small scales)". It is therefore proposed that these two proposals be addressed under a new agenda item 4 "Matters arising from the 16th IH Conference" and that the following items be re-numbered accordingly. PRO 13 and PRO 15, along with Member States' comments, are attached as Documents CHRIS-14-4A and CHRIS-14-4B.

3. CHRIS Letter 3/2002 also provided a draft agenda for CHRIS-14 (Annex B) and asked for comments before 30 June 2002. No change has been suggested to the agenda. A revised draft agenda is attached as Document CHRIS-14-2A, where the only change from the previous draft is the inclusion of a new item 4, as mentioned in paragraph 2 above. It is planned that, as usual, the agenda items will be prioritised at the start of the Meeting.

4. CHRIS Members are reminded that reports/papers, as indicated in the draft agenda, should be received at the IHB **before 15 July 2002**. All reports are being posted on the CHRIS Section of the IHO website as and when they are received at the IHB.

5. No comments have been received on the draft Terms of Reference for the new Chart Standardization and Paper Chart Working Group (CSPCWG) nor on the revised ToR for CHRIS, which were sent with CHRIS Letter 3/2002 (Annexes C and D, respectively). As a result, they will be considered as they stand under agenda item 7.5.

On behalf of the Directing Committee
Yours sincerely,



Rear Admiral Neil GUY
Director

Encls: Revised Draft Agenda (CHRIS-14-2A)
PRO 13 (CHRIS-14-4A) and PRO 15 (CHRIS-14-4B)

14th CHRIS Meeting, Shanghai, China, 15-17 August 2002**DRAFT AGENDA (July 2002)**

1. Opening and Administrative Arrangements

<i>Docs:</i> CHRIS-14-1A	<i>List of Documents (IHB)</i>
CHRIS-14-1B	<i>List of participants (IHB)</i>
CHRIS-14-1C	<i>Membership of CHRIS and related WGs (IHB)</i>
CHRIS-14-1D	<i>CHRIS Membership (IHB)</i>

2. Approval of Agenda

<i>Doc:</i> CHRIS-14-2A	<i>Agenda (IHB)</i>
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3. Matters arising from Minutes of 12th CHRIS Meeting

<i>Docs:</i> CHRIS-14-3A	<i>Minutes of CHRIS-13 (IHB)</i>
CHRIS-14-3B	<i>Status of Actions List from CHRIS-13 (IHB)</i>
CHRIS-14-3C	<i>Terms of Reference for CHRIS Committee and related Working Groups (IHB)</i>

4. Matters arising from the 16th IH Conference

<i>Docs:</i> CHRIS-14-4A	<i>PRO 13 - Compilation scales for electronic data bases</i>
CHRIS-14-4B	<i>PRO 15 - Enhancement of the use of data at small scales</i>

5. Report on the “WEND Study”

<i>Doc:</i> CHRIS-14-5A	<i>Report on the “WEND Study” (IHB and Portugal)</i>
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6. Report on MSC 74 and NAV 48

<i>Doc:</i> CHRIS-14-6A	<i>Report on MSC74 and NAV48 (IHB)</i>
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7. Reports by CHRIS Working Groups

7.1	Transfer Standard Maintenance and Application Development (TSMAD)
<i>Doc:</i> CHRIS-14-7.1A	<i>Report on TSMAD Activities (C. Drinkwater)</i>
7.2	Colour and Symbol Maintenance (C&SMWG)
<i>Doc:</i> CHRIS-14-7.2A	<i>Report on C&SMWG Activities (M. Jonas)</i>
7.3	Technology Assessment (TAWG)
<i>Doc:</i> CHRIS-14-7.3A	<i>Report on TAWG Activities (M. Casey)</i>
7.4	Standardization of Nautical Publications (SNPWG)
<i>Doc:</i> CHRIS-14-7.4A	<i>Report on SNPWG Activities (IHB)</i>
7.5	Chart Standardization and Paper Chart (CSPCWG)
<i>Doc:</i> CHRIS-14-7.5A	<i>Report on CSPCWG Activities (P. Cox)</i>

8. ENC Security Scheme

<i>Docs:</i> CHRIS-14-8A	<i>Report on Activities of the CHRIS Data Protection Scheme Advisory Group (DPSAG) (R. Sandvik)</i>
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9. Liaison with Industry

<i>Doc:</i> CHRIS-14-9A	<i>Report on the June 2002 Marine Industry Workshop (IHB)</i>
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10. Status of IEC 61174 and IEC 62288
Docs: CHRIS-14-10A Report on IHO ENC and RNC Test Data Sets (IHB)
CHRIS-14-10B Report on IEC-TC80-WG 7 Activities in relation to CHRIS (D. Mades)
CHRIS-14-10C Report on IEC-TC80-WG13 Activities in relation to CHRIS (L. Alexander)
11. Vector Data Development
- 11.1 RENCs
Docs: CHRIS-14-11.1A PRIMAR Stavanger Report to CHRIS (R. Sandvik)
CHRIS-14-11.1B ICE Report to CHRIS (P. Wainwright)
CHRIS-14-11.1C MBS Virtual RENC Report to CHRIS (R. La Pira)
- 11.2 ENC Development
Doc: CHRIS-14-11.2A Report on ENC Development (IHB)
- 11.3 DNC Development
Doc: CHRIS-14-11.3A Report on DNC Development at US-NIMA (C. Andreasen)
- 11.4 Inland ECDIS
Docs: CHRIS-14-11.4A Report on Inland ECDIS Development in Europe (M. Jonas)
CHRIS-14-11.4B Report on Inland ECDIS Development in North America (L. Alexander)
12. Marine Information Objects (MOI)
Docs: CHRIS-14-12A Report on HGMIO Activities (L. Alexander)
13. Projects of interest to CHRIS (e.g. SHARED or CGMECIP)
Docs: CHRIS-14-13A Report on the SHARED Project in Southeast Asia (Singapore)
CHRIS-14-13B Report on the CGMECIP Project in the Caribbean Area (L. Alexander)
14. Conferences of interest to CHRIS
Docs: CHRIS-14-14A Report on GEOMATICA 2002, Cuba, Feb. 2002 (IHB)
CHRIS-14-14B Report on CIRM Conference, Italy, May 2002 (IHB)
CHRIS-14-14C Report on MEH Conference, Indonesia, May 2002 (IHB)
15. Open ECDIS Forum
Doc: CHRIS-14-15A Report on OEF Activities (L. Alexander)
16. Liaison with other Groups
- 16.1 ISO-TC211 (Geographic Information-Geomatics)
Doc: CHRIS-14-16.1A Report on TC211 Activities in relation to CHRIS (T. Pharaoh)
- 16.2 ICA Commission on Spatial Data Standards
Doc: CHRIS-14-16.2A Report on Activities of ICA Spatial Standards Commission (M. Huet)
- 16.3 Other groups, e.g. IMO, IALA
Doc: CHRIS-14-16.3A Relations with International Organizations (IHB)
17. ECS Developments
Docs: CHRIS-14-17A Draft ECS Data Standard – ISO 19379 (M. Rogoff)
CHRIS-14-17B Draft ECS Equipment Standard – RTCM (F. Ganjon)

18. Status of IHO Publications on ECDIS

Doc: CHRIS-14-18A IHO Publications on ECDIS (M. Huet)

19. Any Other Business

Docs: CHRIS-14-19A Electronic Commerce for Nautical Charts (D. Enabnit)
CHRIS-14-19B Print on Demand (D. Enabnit)

20. Date and Location of Next Meeting.

14th CHRIS Meeting, Shanghai, China, 15-17 August 2002

PRO 13 - COMPILATION SCALES FOR SUPPORT OF ELECTRONIC CHART DATABASES

Submitted by: United States of America (WORK PROGRAMME 3)

- References:
1. IHO Publication M-3, Resolutions of the International Hydrographic Organization, Chapter B – Charts
 2. IHO Publication M-4, Chart Specifications of the IHO, Section 200
 3. IHO Publication S-57, Appendix B.1 – ENC Product Specification, Annex A

PROPOSAL

The Conference is requested:

That the IHO adopt standard compilation scales to support the zoom in and out feature of electronic chart systems and to eventually provide for seamless databases supportive of digital GIS applications. **A new paragraph for IHO Resolutions, Chapter B – Charts is proposed as follows:**

B1.18 Standard Compilation Scales for Electronic Chart Databases

1.- To support the capability of electronic chart systems to display data at a range of scales, both over and under scale, and to provide for a transition to seamless levels of data to support digital Geographic Information System applications, it is recommended that Hydrographic Offices compile data to standard scales. Through the use of SCAMIN and possibly SCAMAX* attribution, compilation can be at a large scale and features may be turned off or on automatically as the user makes the transition through various scales. For features such as the shoreline, a family of generalized shorelines at different scales would be used for display over a band of scales on either side of the compilation scale. The recommended digital compilation scales are as follows:

<u>SCALES</u>	<u>TYPICAL USES</u>
1: 1,000	Berthing, harbor maneuvering and large-scale inland charts.
1: 10,000	Harbor, large-scale approach and inland charts.
1: 100,000	Small-scale approach and coastal charts.
1: 250,000	GEBCO plotting sheets, topo-bathymetric charts and military graphics.
1: 1,000,000	General coverage and International Bathymetric Charts.
1: 10,000,000	GEBCO and small-scale overview charts.

EXPLANATORY NOTE

To support paper chart navigation, nations have compiled charts at a wide variety of scales. Digitization of the existing paper chart coverage at multiple scales does not provide the seamless database needed for modern digital cartography. Continuous contours are needed for electronic chart navigation warning

systems and GIS displays, not digitization of paper charts with discontinuous contours. Further, it is impossible for national cartographers to compile digital charts to the almost infinite range of scales that may be displayed by the operator of an electronic chart system or digital Geographic Information System. To respond to the need for seamless databases, commercial firms sometimes recompile national Hydrographic Office data to support users, but these data are not the official data required by some users. Before national Hydrographic Offices individually begin to adopt specific scales, which would not support regional and global seamless databases, IHO should provide guidance in its Resolutions as to recommended compilation scales to support electronic chart databases. In this way, over time a global seamless database can evolve.

As a general “rule of thumb”, a user can function over or under scale by a factor of about 4X after which the data becomes either broken line segments or begins to over-plot and consolidate line graphics into an unacceptable display. In the USA, the largest paper chart insets are currently at 1:2,500 scale, but docking charts are already beginning to be used at 1:500 scale. Thus, 1:1,000 scale has been selected to support the larger-scale products envisioned for the future. In rationalizing the proposed digital compilation scales, the U.S. has avoided the existing concept of specific scales for Harbor, Approach, Coastal and General charts since these are defined differently by many Member States in relation to their paper chart products. For electronic data, the recommended scales were selected with a bias to larger scales such that they will support generalization from the digital chart database into the various scales needed for paper chart production. That is, it is envisioned that a large-scale compilation such as 1:1,000 could be used in support of products to 1:4,000 or 1:5,000, i.e., 4X to 5X, and the 1:10,000 scale might be used to support a 1:5,000 scale product, i.e., ½X. Using ½X could possibly involve use of SCAMAX, but perhaps only SCAMIN is required.

The recommended scales have been selected in accord with IHO Publication M-4, Section 211, SCALE, which specifies natural scales, i.e., multiples of 1,000 or 2,500, should be used for all charts. The number of scales also have been selected to cover the range of navigational purposes specified in IHO Publication S-57, i.e., Overview, General, Coastal, Approach, Harbor, and Berthing.

It is to be noted that these are recommended scales and Member States may transition to these scales over time as resources allow. A Resolution is needed to provide guidance for international development of seamless digital databases.

* It is to be noted that the use of SCAMAX is currently prohibited by the ENC Product Specification, S-57, Appendix B.1, Annex A – Use of the Object Catalogue for ENC, paragraph 2.2.7.

IHB COMMENTS

The IHB supports this proposal.

MEMBER STATES' COMMENTS

AUSTRALIA

Australia opposes this proposal. Furthermore, it is Australia's view that this proposal is technical in nature and should in any case be considered by the relevant IHO technical committee or working group and if necessary amending action achieved through Circular Letter or following a recommendation to the Conference as part of the relevant IHO Work Programme report.

Australia notes that the development of S-57 Edition 3.0 specifically went away from fixed scale ranges (this was the case with S-57 Version 2.0), to allow maximum flexibility in ENC production, relating various navigational purposes to intended usage (and not to scale ranges). This flexibility allows nations such as Australia to encode ENCs at various compilation scales, even within the one cell, depending on the

underlying data available. In turn, this provides the mariner with the most appropriate data to gain the most benefit from ECDIS; for example, increased contour intervals in depth critical areas such as channels and narrow passages.

In any case the proposal cites scales that are not necessarily in harmony with scale ranges used by most Member States for paper charts and bathymetric products. The proposal cites berthing, harbour manoeuvring and large-scale inland charts at a fixed scale 1:1000. Australia is well aware that some berthing charts will be required at scales of 1:500 or perhaps larger. Current S-57 arrangements allow for this.

A scale of 1:100 000 is nominated for approach and coastal charts. Where would a 1:300 000 series of coastal charts fit with this proposal? A scale of 1:250 000 is nominated for GEBCO charts, yet the IHO specification for GEBCO is a scale of 1:1million. These are obvious issues that must be addressed at a technical level if this proposal is to proceed.

In summary, it is Australia's view that PRO 13 is a retrograde step and in any case must be referred to the relevant IHO technical WG (TSMAD) for consideration prior to any decision being made.

BRAZIL

Brazil agrees with the proposal submitted by USA.

CANADA

Canada agrees with the overall intent of this proposal but feels it would be best handled as a technical issue to be reviewed through the appropriate committee (e.g. CHRIS).

CHILE

Chile supports the proposal.

CROATIA

Croatia supports this proposal.

FINLAND

NOTE: Finland believes that the issues contained in some of the proposals do not need to be decided at the Conference. These are PROs 12, 13, 14 and 15. They would be processed more efficiently by an appropriate Technical Committee or by the IHB by Circular Letter.

Not supported.

The issue (i.e. the use of nominal and compilation scales and the use of SCAMIN and SCAMAX attributes) should be studied in more detail by e.g. the CHRIS Committee.

(See Note above).

FRANCE

Not in favour.

There are several reasons, some of which are explained here below:

- a) The final aim of a nautical chart is safety of navigation. The current charts, whether they be in paper form or electronic, depend essentially on the choice of a scale which is adapted to the navigational conditions of the charted area. The determination of the information and its density depend on the scale and it is essential to be able to use a large range of scales.
- b) There is no direct link between the necessity to compile charts at standard scales and the necessity to ensure a transition towards seamless data sets. When preparing ENC, the bathymetric contours or area limits are systematically closed to ensure that they define area objects.
- c) The use of the SCAMIN attribute, which triggers or not a display mechanism, cannot replace generalization operations, taking into account the context, which allow a chart to be produced at a given scale. Furthermore, implementing SCAMINs would imply a significant amount of cartographic compilation work (which could be subject to errors).
- d) It is not realistic to adopt a technical resolution which would not be in accordance with internationally adopted standards (IMO, IEC ...) as regards electronic charts.
- e) It is interesting to note that although the GEBCO is an international effort which is widely supported by many hydrographic services, including SHOM, it is not an objective in itself linked to the fundamental responsibilities of hydrographic services.

GREECE

HNHS supports this proposal.

INDIA

The proposal is supported by India.

ITALY

Italy believes that highly technical questions such as these should not be submitted to the floor of general conferences but should rather be addressed by specific WG.

NETHERLANDS

The proposal is supported in principle. However, the choice of scales should be further studied or discussed within the CSC or other (working-) group, as these are not necessarily the best choice.

Essential question is: which is the maximal acceptable factor for scale reduction or enlargement. In the proposed list the scale-steps are not very consistent (vary between 2.5 and 10), leading to a maximal reduction or enlargement by $\sqrt{10}$, (= 3.16).

Tests should confirm that this value is acceptable.

Especially in the larger scale ranges it is guessed that more standard scales would be necessary.

NEW ZEALAND

New Zealand supports the proposal in principle, but notes that it is technically complex to achieve. The concepts touch upon, but do not embrace, the need for seamless databases with integration between data captured at large and small scales. It may also involve automated generalization techniques which have yet to be adopted as routine charting or mapping procedures.

The proposal can be advanced through consideration by a technical working group.

NORWAY

Norway is of the opinion that other IHO bodies than the Conference should discuss this proposal (i.e. TSMAD, CSC, Circular Letter).

PERU

Peru supports the proposal as a recommendation.

PORTUGAL

Disagree. It is too specific and would lead to the complete reformulation of the IH-PT ENC folio.

SWEDEN

Sweden does not support the proposal. The aim of the proposal is fully worth a support. However the proposal is reflecting thoughts of a separate database for specially compiled ENC's. Today HO's are struggling to make one single database for producing as well printed charts as ENC's to get rationalized and avoid making errors by maintaining at least two databases, but believes that the scale area 1:100 000 should be 1:50 000 to cover a wider spectrum of national standards. In many coastal areas covered by a lot of islands or archipelagos the most used scales of charts are between 1:50 000 and 1:70 000. Of course different HO's are using different ways in compiling the charts. For Sweden that means that the charts are compiled in double the scale but generalized for the scale at publication. This is the fact also with digital source material to get a better precision in navigational aids and information. With that in mind Sweden proposes the scale band 1:50 000 instead of 1:100 000, if the proposal would be accepted as, with the safety at sea in mind, it is better with a diminished chart scale compared with the original scale than an enlarged. Also Sweden in that case proposes the term coastal charts should be transferred to the scale band 1:250 000. The term "military graphics" should be deleted from the latter scale band as it must be individual for different military organizations.

TURKEY

No not agree.

Turkey is determining the navigational purposes of ENC cells, based on the following range of scales and finalised 56 cells as of September 2001;

Berthing, bigger than 1:2 000
 Harbour, between 1:2 000 and 1:20 000
 Approach, between 1:20 000 and 1:50 000
 Coastal, between 1:50 000 and 1:150 000
 General, between 1:150 000 and 1.500 000
 Overview, smaller than 1:500 000

In addition to that 2-3 of our charts are digitised according to original scales. Recompilation of those charts with new scales will create many technical problems including new surveys which will cause HO's to lose valuable time in their efforts to finish the digitisation of their charts.

UK

The theory of this proposal is creditable but UK considers there are practical difficulties associated with its introduction. From the user's perspective there is a need for nations to produce consistent ENC's that can be knitted together into a coherent or seamless world-wide series. However, as the ENC product

specification does not define the bands of navigational purpose by specific ranges of scale, different countries with the same compilation scales have chosen to place their data in different usage bands. At the very least a number of HOs would have to re-allocate their ENC's to different usage bands in order to achieve the objectives of this proposal. This would not be a simple process and some cells would end up without usage bands in which to put them.

Additionally, the proposal does not recognise that the majority of nations still compile ENCs from their paper chart series and are thereby tied to the variety of scales that this presents.

It is the opinion of the UKHO that the technical nature of this proposal does not render it appropriate for detailed discussion at an IH Conference. We therefore recommend that it be considered in more detail by the IHO CHRIS before it is progressed any further. Any proposed changes of this nature could then be more appropriately incorporated into M-4 Part B rather than issued as a TR.

14th CHRIS Meeting, Shanghai, China, 15-17 August 2002**PRO 15 – IHO MULTINATIONAL AGREEMENT FOR USE OF SMALL-SCALE DATA**Submitted by : USA (WORK PROGRAMME 3)Reference: IHO Publication M-3-Resolutions of the International Hydrographic Organization**PROPOSAL** (see IHB comments on following page)

The Conference is requested to agree that the International Hydrographic Organization (IHO) enhance the use of data at small-scales by implementing a centralized multinational agreement. This agreement would be held at the International Hydrographic Bureau in Monaco and be an alternative to the often complex bilateral negotiations required for use of data under IHO Technical Resolution A 3.4. Signatories to this multinational agreement would retain their intellectual property rights for their data and information but agree through the granting of a “free license” to the gratis use of their geo-spatial data at small scales (defined as 1:500,000 scale or smaller). Through this document, signatory Hydrographic Offices would benefit from agreement to a “free license” which would allow each of the signatory Hydrographic Offices to recompile the data of any other signatory Hydrographic Office into small-scale products without need for formal bilateral negotiations.

EXPLANATORY NOTE

At the XVth International Hydrographic Conference of IHO Member States, the IHO Technical Resolution A 3.4 was revised to redefine provisions for exchange and reproduction of nautical products. Resolution A-3.4 now recognizes that “Member States have rights to the products of their Hydrographic Offices under national and international law.” It was further agreed that negotiation of bilateral arrangements should guide future cooperation amongst IHO Member States, however for small-scale products such negotiations can involve many nations, are complex and can involve a significant drain on resources.

Small scale maps and charts are essential for global scientific research and for general presentation of the geography of earth for a wide variety of important purposes, e.g., education of children or indexing of large-scale nautical charts. Studies such as those associated with global warming, tidal modeling, hazardous spill projection, coral reef studies, etc. are of extreme importance to humanity and require the availability of small-scale chart products. These are not typically high volume sale items and may not warrant the cost of widespread bilateral negotiations between IHO Member States.

It is therefore proposed that IHO develop an international agreement as an alternative to bilateral negotiations between Member States. Under the agreement, signatory parties would grant a free license for publicly available, nationally produced chart products at small-scales (1:500,000 scale or smaller). Signatory parties would avoid the need for widespread bilateral negotiations for release of intellectual property rights.

It should be noted that there is no obligation for any Member State to agree to such a license. This proposal is only to provide an option to simplify the issuance of small-scale IHO Member State products. It is suggested that a Member of the Directing Committee should lead the development of such an agreement with support from the IHO Legal Advisory Committee.

It is noteworthy that the IHO East Asia Hydrographic Commission has recognized the need for a better approach to provide for small-scale charts and has already implemented a regional arrangement. The EAHC arrangement does not provide for electronic charts but it is proposed that this agreement include electronic chart data for which a standard display as defined in the ECDIS performance standard comprises data compiled for display at 1:500,000 scale or smaller. Although a user may scale up or down from the basic scale of 1:500,000, the compilation scale for the standard display must not be larger than 1:500,000 scale. The decision to participate or not in the proposed central agreement would remain with the individual Hydrographic Offices that hold the relevant intellectual property rights.

In order to publish an appropriate document that implements this proposal, the IHB proposes to task the LAC to draft an appropriate "IHO Member States Agreement" to be deposited at the IHB.

IHB COMMENTS

The spirit of the proposal is clearly aimed at drastically reducing the bureaucracy related to licensing the use of hydrographic data contained in small-scale charts.

MEMBER STATES' COMMENTS

AUSTRALIA

Australia notes in particular that an underlying principle of this PRO 15 is that small scale data will be effectively free of charge and will be the subject of a "common licence" that provides standard terms of use. It is Australia's experience that such "common licence" arrangements cannot take into account the diverse concerns and safeguards required by individual governments regarding appropriate control over the use and the users of their data. This means that relatively few, if any, Member States would actually make use of such a licence.

Unless a Member State intends that all its data will be made available free and with little or no restriction, then it will be necessary at some stage to engage in bi-lateral arrangements in accordance with TR A3.4 (copyright), and TR B5.3 and M-4 (INT chart scheme) in order to address the use of larger scale data. When this occurs, any universal arrangements for small-scale data may well conflict with national requirements for the treatment of larger scale data.

It is Australia's view that licensing the use of data should be considered holistically from the outset, regardless of scale, and be guided by the extant IHO guidance (TR A3.4 and TR B5.3 and M-4). Separate "universal" agreements will only lead to subsequent confusion, disputation and disharmony.

If this proposal is however agreed by the Conference, it is Australia's view that it is inappropriate to task the LAC with drawing up a suitable "standard" agreement. To do so will incur considerable expense on those Member States who participate in the LAC because the members of the LAC are funded directly by their respective governments. If work is to proceed, it should be funded either by those Member States supporting the proposal (and presumably prepared to use the standard agreement) or centrally by the IHO.

BRAZIL

Brazil agrees with the proposal submitted by USA.

CANADA

Canada does not support this proposal.

CHILE

Chile is giving careful consideration to this proposal as it might have some legal national implications due to the fact that paragraph five of the Explanatory Note clearly state that: “ it is proposed that this agreement include electronic chart data for which a standard display as defined in the ECDIS performance standard comprises data compiled for display at 1:500,000 scale or smaller.”

CROATIA

Croatia fully supports this proposal

FINLAND

NOTE: Finland believes that the issues contained in some of the proposals do not need to be decided at the Conference. These are PROs 12, 13, 14 and 15. They would be processed more efficiently by an appropriate Technical Committee or by the IHB by Circular Letter.

Supported.

Please notice that this proposal also covers medium-scale charts, because the IHO Publication M-4 specifies the small-scale charts to be at scales 1:2 Million or smaller.

Refer also to the proposed additional WEND rules discussed at the 6th WEND Committee and at the 13th CHRIS Committee (*Documents: WEND-6-8A, CHRIS-13-4B*).

(See Note above).

FRANCE

Not in favour.

France would not, in principle, be opposed to the proposal insofar as the data concerned, for the most part, has already been paid royalties at larger scales. However, such a measure should include a supplementary payment to take into account the compilation and cartographic work carried out by the chart producer country.

In order to simplify the negotiation work (difficulty in listing small scale data and also the fact that the data is old and even of poor quality) and to take into account the fact that royalties are paid for the largest scales, a chart producer could be paid only for the cartographic and compilation work undertaken in an international framework, thus recognized by the IHO. This is what France applies in the bilateral agreements that it has entered into, as part of the implementation of Technical Resolution A3.4.

GREECE

HNHS supports this proposal.

INDIA

The proposal is supported by India.

ITALY

Italy rejects the proposal because no advantages can derive to the HOs versus its burdensome implications.

NETHERLANDS

The principle of the proposal is much supported.

However,

1. The limiting scale of 500 000 seems rather large;
2. It is not clear whether the intended agreement will also permit "the general public" to make use of these data. That would not be preferred.

NEW ZEALAND

New Zealand supports the concept of open access, through a "free licence", to all small scale charting.

Standards need to be established to ensure that the latest version of charts is used.

Source hydro authorities must be acknowledged. The country who owns the data should be protected, through appropriate instruments, from litigation arising from errors and omissions resulting from recompilation of the charts or data by other countries.

PERU

Peru agrees with this proposal as far as the Member States retain their intellectual property over the data handed, and is properly recognized as such.

PORTUGAL

If it is approved does not imply any obligation to the Member States, but involves copyright problems. Disagree.

SWEDEN

Sweden supports this proposal per se. However there has already been some problems where navigators have used such charts in digital form outside the producer's area and over zoomed them as there were no larger scale charts available in digital form. When no bilateral agreements or information is given an HO influenced may not be able to meet the demands of larger scale charts in especially digital form.

TURKEY

Bilateral negotiations and the agreements are vital in order to increase the cooperation between the Hydrographic Offices and it is believed that the requirements for 1:500 000 and smaller scale charts can create a good starting point to improve these relations, therefore Turkey supports the continuation of the present status about the licensing procedures.

UK

The UK supports the general principle of this proposal but tenders the following comments.

We note that GEBCO and other products currently support the academic and educational requirements for small scale data mentioned in this proposal.

There are already arrangements in place for the gratis exchange of data at a scale of 1 : 1,500,000 and smaller e.g. NSHC custodianship arrangement. In order to avoid confusion and further complexity it is therefore considered that a scale of 1: 1,500,000 would be more appropriate for this proposal.

Consideration needs to be given to the exact ownership of the data contained in a publication. In a large number of cases not all the data is the property of the publishing HO and therefore they would only be able to give permission to reproduce that part to which they own the rights. If a portion of the data belongs to a

MS which is not a signatory to the proposed arrangement, then their permission will have to be sought separately. In addition it would have to be made clear whether any permission granted would only apply to the signatory or whether it would allow them the freedom to sub-license the data to a third party.

Where it is the case that other agreements-arrangements of a similar nature already exist (such as bilateral arrangements), it would have to be decided which agreement-arrangement would take priority.

There would need to be a mechanism in place to allow Member States to join, leave or amend the system as required. To avoid the need to decide jurisdiction and power of enforcement, it would be better to make any arrangement non legally binding. It may be more appropriate to use this proposal as a discussion leading to a Technical Resolution.
