

**15th CHRIS MEETING
IHB, Monaco, 10-13 June 2003**

**CHRIS Work Plan
Version 1.0**

This document contains the current work programme of CHRIS and CHRIS working groups.

Tasking of working groups were approved at CHRIS 14 15-17 august 2002.

The justification for CHRIS Working Group tasks is contained in IHO Work Programme 3, Element 3.1, Element 3.4 or both Elements. Section 1.1.1 list each Working Group's tasks, which result from Element 3.1; the priority of the tasks as listed in the IHO Work Programme; and the target date for the tasks' completion. Section 1.2.1. provides the same information with respect to Element 3.4. Each task is given a reference number. This takes the form 3.1.n (n') or 3.4.n (n'), where 3.1 or 3.4 refers to the Work Programme Element, n is a sequential number starting at 1, and (n') is the number of the CHRIS meeting that approved the inclusion of the task in the CHRIS Work Plan.

Section 2 provides a combined list of TSMAD tasks based on the contents of Sections 1.1.1 and 1.2.1. The tasks, certain of which are sub-divided into constituent work items (A, B, C etc) for reasons of convenience, are then listed together with their priority; details of key milestones; plus other information, for example a task or work item has been proposed but has not yet been started. Subsequent Sections provide equivalent information for the other CHRIS Working Groups."

Next meeting of CHRIS, the 15th, to take place at the IHB, Monaco, on 10-13 June 2003, followed by the 2003 IHO-Industry Days on 16-17 June.

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1. CHRIS relevant elements of IHO Work Programme 2003-2007

1.1 IHO Programme 3. Element 3.1 Nautical Cartography

- O 3. 1. 1** Continuation of the co-operative work on development of ECDIS services, particularly:
 - 3.1.1.1 On-going refinement and expansion of specifications and standards through the CHRIS and its working groups, with links to the CSC, IEC and ISO. **[HP]**
 - 3.1.1.3 Participation in the regulatory, testing and certification aspects of ECDIS through the IMO/IHO HGE and IEC/TC80 in matters concerning ECDIS, RCDS, and ECS. **[HP]**
 - 3.1.1.4 Develop contacts with the international bodies representing private industry [umbrella organizations], to reduce potential conflicts and to maximize quality and availability of adequate digital nautical products, by inviting their participation in appropriate IHO forums, and through IHO participation in non-government activities such as Open ECDIS Forum [OEF]. **[HP]**
- O 3. 1. 2** Participation in the development of standards for cartography and geographic information in association with groups such as DGIWG, ICA, IEC and ISO, in order to ensure that the interests of IHO members receive attention in the formulation of standards. **[HP]**
- O 3. 1. 3** Development of the international [paper] chart series through the relevant committees and bodies. **[MP]**
 - 3.1.3.1 Development of new symbology for ship routeing, including archipelagic sea lanes, vessel traffic services, environmentally sensitive areas, etc. **[MP]**
 - 3.1.3.2 Progress of the work of the Committee on the Standardization of Nautical Publications, (i.e. Sailing Directions and other nautical publications and monitor the development of standard formats for Notices to Mariners. **[MP]**
 - 3.1.3.3 Resolution of issues concerning the extension of the INT chart scheme to include large scale charts. **[MP]**

Tasks

- T 3. 1. 1** Revise, develop, and maintain the following publications:
S-52, S-57 New Editions **[by 2004]**, M-4, M-11, **[by 2003]**

1.1.1 CHRIS Tasking of WG iaw element 3.1 of IHO Work Programme

CHRIS WG	Tasking	Priority	Target	Remarks
TSMAD	3.1.1 (14) Develop S57 Ed. 4.0	High	2004	No product specifications shall be developed unless specifically directed
TSMAD	3.1.2 (14) Keep S58 Recommended ENC validation checks up to date	High	Continuous	
TSMAD	3.1.3 (14) Support FAQ and encoding advice sections of IHO web site up to date	High	Continuous	
TSMAD	3.1.4 (14) Liase with(External organisations)			
TSMAD	3.1.5 (14)...			
C&SMWG	3.1.1 (14) Maintain S52, develop App. 2 "Presentation Library User's Manual", Edition 4.2 and Presentation Library, Edition 3.3	High	2004	
C&SMWG	3.1.2 (14) Develop colour calibration routines for flat panel displays	High	2004	
C&SMWG	3.1.3 (14) Set S52 App.2 "Presentation Library User's Manual", Edition 4.2 and Presentation Library, Edition 3.3 in force with one year grace period	High	2003	
C&SMWG	3.1.4 (14) Contribute to IEC TC 80 WG 13 symbol harmonizing work and Provide guidance to IEC TC 80 WG 13 on preferable colours and line styles	High	na	
C&SMWG	3.1.5 (14) Develop paper based description of Presentation Library Symbols Edition .3.3	High	2003	
C&SMWG	3.1.6 (14) Investigate feasibility of reduced set of colour tables	Medium	2004	
C&SMWG	3.1.7 (14).....			
CSPCWG	3.1.1 (14) Revise M4.	Medium	2003	
CSPCWG	3.1.2.....			
TAWG	3.1.1...			
TAWG	3.1.2			
SNPWG	3.1.1 (14) Develop NP3 specification for use in ECDIS	Medium		
SNPWG	3.1.2			
HGMIO	3.1.1. (14)			
HGMIO	3.1.2.			

1.2 IHO Programme 3. Element 3.4 Data for Geomatics Application

- O 3.4.1** Assist Member States to optimize and extend the use of their hydrographic data sets for purposes other than navigation through:
- 3.4.1.1. Development of generic product and service specifications.
Investigate, through the Subgroup of TSMAD for Hydro Survey Data and Exchange, how to include these data as a part of S-57. **[HP]**.

Tasks

- T 3.4.2** Complete harmonization of IHO spatial data standards with ISO standards. **[by 2004]**

1.2.1 CHRIS Tasking of WG iaw element 3.4 of IHO Work Programme

CHRIS WG	Tasking	Priority	Target	Remarks
TSMAD	3.4.1 (14) S57 Ed. 4.0 development iaw. ISO TC 211 standard	High	2004	
TSMAD	3.4.2 (14) Develop S57 ed. 4.0 Bathymetric Data Product specification	High	2004	
C&SMWG				
etc				

2. TSMAD Work Plan

[Any remarks relevant to the understanding of the plan to be inserted here]

2.1 TSMAD Tasks

- 3.1.1 (14) Develop S57 Ed. 4.0. No product specifications shall be developed unless specifically directed
- 3.4.1 (14) S57 Ed. 4.0 development iaw. ISO TC 211 standard
- 3.4.2 (14) Develop S57 ed. 4.0 Bathymetric Data Product specification
- etc.

Work item	Priority	Milestones	Remarks
A Develop S57 Edition 4.0 Object Catalogue.		1 st draft ddmmyyyy, 2 nd draft ddmmyy	
B Develop S57 Edition 4.0 Raster and Matrix data models.			
C Develop S57 Edition 4.0 Time varying and 3-D data.			
D Develop S57 Edition 4.0 Expansion of meta data contents.			
E Develop S57 Edition 4.0 Review of S-57 base documents.			
F Develop S57 Edition 4.0 Portrayals (Data Depiction).			
G. Develop S57 Edition 4.0 Bathymetric Data Product Specification.	High		Target 2004
H. Develop S57 Edition 4.0 ENC product specification	Low		Not Activated
I Develop S57 to paper chart functionality	Low		Not Activated

Planned meetings.
Date, venue

3. C&SMWG Work Plan

[Any remarks relevant to the understanding of the plan to be inserted here]

3.1 C&SMWG Tasks

- 3.1.1 (14) Maintain S52, develop App. 2 “Presentation Library User’s Manual”, Edition 4.2 and Presentation Library, Edition 3.3
 - 3.1.2 (14) Develop colour calibration routines for flat panel displays
 - 3.1.3 (14) Set S52 App.2 “Presentation Library User’s Manual”, Edition 4.2 and Presentation Library, Edition 3.3 in force with one year grace period
 - 3.1.4 (14) Contribute to IEC TC 80 WG 13 symbol harmonizing work and Provide guidance to IEC TC 80 WG 13 on preferable colours and line styles
 - 3.1.5 (14) Develop paper based description of Presentation Library Symbols Edition .3.3
 - 3.1.6 (14) Investigate feasibility of reduced set of colour tables
- Etc.

Work item	Priority	Milestones	Remarks
A Draft S52 App.2 “Colour & Symbol Specifications for ECDIS”, Edition 4.2	High	1 st draft: End of February 2003 Final draft: End of March 2003	
A.1 incorporate earlier deferred amendments	High	End of January 2003	
A.2 incorporate LCD calibration amendments	High	End of January 2003	
B. Draft S52, Annex A of App. 2 “ECDIS Presentation Library User’s Manual”, Edition 3.3	High	1 st draft: End of February 2003 Final draft: End of March 2003	
B.1 Refinement of Conditional Symbology Procedures (CSP)	High	Mid of January 2003	
B.2 Testing of refined CSP	High	Mid of February 2003	
B.3 Production of refined .DAI files (digital Version of Edition 3.3)	High	End of February 2003	
B.4 Production of Test Data Set Plots for Edition 3.3	High	End of February 2003	
B.5 Paper based description of Presentation Library Symbols Edition .3.3	Medium	End of March 2003	Originally it was not planned to add this to Edition 3.3 – in case of availability it will be added, otherwise it will be amended later 2003
C. Set revised parts of S52 in force with one year grace period	High	1 July 2003	MS Approval required
C.1. S52 App.2 “Colour & Symbols Specifications for ECDIS”, Edition 4.2	High	1 July 2003	MS Approval required
C.2. S52 Annex A of App.2 “ECDIS Presentation Library Users Manual”, Edition 3.3	High	1 July 2003	MS Approval required
D. Contribute to IEC TC 80 WG 13 symbol harmonizing work			
D.1 Provide guidance to IEC TC 80 WG 13 on preferable colours and line styles	High	Done in November 2002	
D.2 Contribute to AIS Testbed of FGAN	High	Provision of suitable colours, symbols, line style–	

Work item	Priority	Milestones	Remarks
		Done November 2002 Contribution to test plan: January 2003 Performance of tests by FGAN: February to April 2003 Discussion of test results during 14. C&SMWG meeting: May 2003 Advisory paper to IEC WG13 reg. Suitable AIS symbols: End of May 2003	
E. Reduced set of colour tables	Medium	Continuation of tests at MSCW until end of March 2003 Preparation of status report until end of April 2003 Discussion of Status report at C&SMWG 14 in Ottawa, May 2003	
F Adapt colour calibration routines for flat panel displays	Medium	Review of technical progress at C&SMWG 14	The technical progress of flat panel displays is unpredictable – calibration routines have to be reconsidered due to this progress
G Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS	Medium	Input paper explaining the topic for C&SMWG 14, May 2003 Possibly revision of S-52 main document and annexes until C&SMWG 15, spring 2004	
H Introduce new website based recommendation service for good application practice of S-52	Medium	Discussion about necessity and content at C&SMWG 14, May 2003 Continuous provision after decision of C&SMWG	
I Contribution to harmonised rules for loading strategy, use of SCAMIN and overscale indication	Medium	Consideration of BSH study to the topic and of results of discussion at TSMAD during C&SMWG 14, May 2003	
K Consideration of future M4 revision for S-52 regulations	Medium	Consideration of revised M4 (if available) at C&SMWG 15, 2004	
L Consideration of the implications of future S-57 Version 4.0 to S-52 regulations	Medium	Consideration of draft proposals for a future Version 4.0 at C&SMWG 14, May 2003 and at C&SMWG 15, 2004	

Planned meetings: 14. Meeting of C&SMWG
18 – 20 May 2003, Ottawa, Canada

4. TAWG Work Plan

TAWG has three major theme areas: 1) the implementation of the IHO Security Standard; 2) facilitating Discussion Groups on topics of common interest to TAWG members; 3) a biennial survey of Emerging Technologies and Applications

4.1 TAWG Tasks

- 3.1.1 (14) Data Protection Scheme Advisory Group (DPSAG) Procedures and implications for transforming the current Primar Security Scheme to an IHO Security Scheme V1 (IHOSSV1).
- 3.1.1 (14) (DPSAG) Plan for the development and implementation of new security scheme version based on the experiences from international security developments and the use of public key infrastructures
- 3.1.1 (14) (DPSAG): Finalize CHS IHOSSV1 kernel (formerly CHS PSS)
- 3.1.1 (14) Print on Demand Discussion Group on OEF
- 3.1.1 (14) e-Commerce Discussion Group on OEF
- 3.1.1 (14) Conduct 3rd Biennial Survey of Emerging Technologies and Applications

Work item	Priority	Milestones	Remarks
a) Data Protection Scheme Advisory Group (DPSAG) Procedures and implications for transforming the current Primar Security Scheme to an IHO Security Scheme V1 (IHOSSV1)	H	IHO Security Scheme v1 Intellectual Property Rights turned over to the IHB <u>December, 2002</u>	See Minutes 1 st meeting of IHO Data Protection Scheme Advisory Group: <u>Delayed</u>
b) (DPSAG) Procedures and implications for transforming the current Primar Security Scheme to an IHO Security Scheme V1 (IHOSSV1)	H	IHO Security Scheme v1 turned over to the IHB as Scheme Administrator <u>March 1, 2003</u>	<u>Delayed</u>
c) (DPSAG) Plan for the development and implementation of new version based on the experiences from international security developments and the use of public key infrastructures	M	Complete development and submit IHO Security Scheme v2 <u>April 1, 2004</u>	Multi-year activity
d) (DPSAG): Finalize kernel of IHOSSV1 (formerly CHS/PSS)	H	Kernel available to interested parties: <u>Dec. 14, 2002</u>	ref. IHO CHRIS/13/8F : <u>Done</u>
e) Print on Demand Discussion Group on OEF	M		ongoing

Work item	Priority	Milestones	Remarks
f) e-Commerce Discussion Group on OEF	M		ongoing
g) Conduct 3 rd Biennial Survey of Emerging Technologies and Applications	M	Presentation of results of Survey: <u>Nov. 1, 2003</u>	To be conducted over Summer and Fall of 2003

Planned meetings. Data Protection Scheme Advisory Group (DPSAG) Date, venue TBD : The remaining work of the TAWG is done via email

5. CSPCWG Work Plan

[Any remarks relevant to the understanding of the plan to be inserted here]

5.1 CSPCWG Tasks

3.1.1 (14) Revise M4

Etc.

Work item	Priority	Milestones	Remarks
A Develop new symbology for	Medium		Target 2003
Etc.			

Planned meetings.

Date, venue

6. SNPWG Work Plan

This is the very first draft of the SNPWG Work Plan and I hope that the members of the working group will have additional and more detailed ideas about the work items, so that the Work Plan could be expanded and some more detailed planning is possible.

The Work-Plan will be distributed among the members of the WG and a discussion about it will be opened. I am planning to have a SNPWG-Meeting before the next CHRIS meeting and an agreed Work-Plan must be one of the results of that meeting.

Regards,

Johannes Melles

6.1 SNPWG Tasks

3.1.1 (14) Develop NP3 specification for use in ECDIS
Etc.

Work Item		Priority	Milestones	Remarks
A	Decide on the Data Format of digital NPs intended for use in ECDIS	High	Decision for a Data Format (August 2003)	Two options are discussed internationally: S57 or HTML. BSH has developed an extension to S57.
A.1	Look at existing systems on the market			
A.2	Evaluate the pros and cons			
B	Define the content requirements of digital NPs intended for use in ECDIS	Medium	Content Specs (December 2003)	BSH has prepared a study how the NP of the future should look like. The extension to S57 developed by BSH covers all NPs
B.1	Examine the content of traditional NPs			
B.2	Look at existing proposals (BSH etc.)			

B.3	Draft Content Specs			
C	Develop display rules for digital NPs intended for use in ECDIS	Medium	Display rules (October 2004)	
D	Draft guidance documents	Medium	Guidance Docs (December 2004)	
E	Draft revised technical resolutions	Medium	Revised Technical Resolutions (December 2004)	A first revision of the Technical Resolutions was done by the old SNPWG
F	Liase with other CHRIS WG's and other IHO and international bodies	Medium		
F.1	Prepare a proposal for TSMAD		TSMAD-Proposal (June 2004)	
F.2	Liase with the CSMWG for the development of the display rules			

7. DQWG Work Plan

[Any remarks relevant to the understanding of the plan to be inserted here]

7.1 DQWG Tasks

DQWG is dormant.

Work item	Priority	Milestones	Remarks

Planned meetings.

Date, venue

8. HGMIO Work Plan (updated on 30 May 03)

As a technical liaison Working Group that is a subsidiary of two Committees (IHO CHRIS and IEC TC80), the primary purpose of HGMIO is to harmonize the activities of IHO and IEC related to the provision and display of supplemental chart- and navigation-related information on ECDIS. Currently, the primary focus of the WG is to assess the current status of previously developed or proposed IHO S-57 objects/attributes and display aspects that may be related to MIO categories, including:

Ice Information	Meteorological	Tides/Water Levels
Current Flow	Oceanographic	Marine Habitats
Environmental Protection	Vessel Traffic Services (VTS)	

8.1 HGMIO Tasks (assigned by CHRIS)

3.1.1 (14) (tasking not specified)

3.1.2 (tasking not specified)

Work item	Priority	Milestones	Remarks
A. For each MIO category, describe the current status of development efforts (e.g., data or display-related)		At HGMIO-1, Task Leaders were assigned; reports due by March 2003.	Only one report received (Oceanographic)
B. Assess level of completion and further development required		May 2003	To be re-scheduled
C. Recommend to TSMAD and C&WMWG MIO-related matters that warrant consideration for inclusion in next editions of S-57 and S-52		Fall 2003	

Planned Meetings: [note: most HGMIO work done via e-mail]

<u>Date</u>	<u>Location</u>	<u>Activity</u>
17-22 Feb 03	BSH, Hamburg	IEC TC80/WG13
28 Mar 03	Biloxi, MS, USA	One-day Workshop on MIOs and AMLs immediately following 2003 US HYDRO Conf.
12-16 May	CHS, Ottawa	TSMAD S-57 Extension Sub-WG
18-20 May	CHS, Ottawa	C&SMWG 14
21-24 May	St. Petersburg, FL	IEC TC80/WG13
10-13 Jun 03	IHB, Monaco	IHO CHRIS 15
14 Jun 03	IHB, Monaco	2 nd Mtg of HGMIO
16-17 Jun 03	IHB, Monaco	IHO Industry Day