CHRIS WORK PLAN

Draft July 2006

Objective:

To ensure efficient project resource management and alignment, progress monitoring and to provide a communication utility with internal and external parties.

Rationale:

The justification for the CHRIS Workplan are in conformance with the IHO Strategic Plan, and mainly related to the following elements of the IHO Work Programme – 2003/07:

- 3.1. Nautical Cartography
- 3.4. Data for Geomatic Applications

Revisions:

Chairs of each Working Group, along with the CHRIS Chair, will meet prior to each CHRIS meeting to review progress, and to harmonize the Workplan.

Approval:

Once revised, the workplan will be approved by the CHRIS plenary at each annual meeting. CHRIS Chair could seek committee members interim approval for emerging issues between meetings.

Communications:

The CHRIS Workplan will be posted on the IHO website, and a progress summary will be provided at IHO Conferences.

Project Numbering:

Each task will be given a sequential number independent of related Working Group. The related IHO Work Programme Element number and the specific CHRIS meeting that approved the inclusion of the task will be identified in the CHRIS Work Plan summary. Each WG SubTasks will be numbered using an alphanumeric sequence, "An,Bn,Cn.."

Priorities:

Three Levels of Priorities (H, M, and L) will be assigned by CHRIS using the Guidelines on the Evaluation of Proposals in the Work of CHRIS and Subsidiary Bodies.

1. Guidelines for the Evaluation of Proposed New work Items for CHRIS and CHRIS subsidiary bodies (Version 1.1 – January 2005)

Introduction

- 1.1 In order to best use the limited resources available to CHRIS and its subsidiary bodies it is necessary for the CHRIS to evaluate and prioritise proposed new work items. These guidelines are based on the principles agreed at CHRIS/15 and are intended to provide a uniform basis for this evaluation and prioritisation.
- 1.2 Evaluation should be done as a two-stage process:
 - .1 general consideration leading to acceptance or rejection; and if accepted,
 - .2 establishment of priorities.

General acceptance

- 1.3 Before deciding to include a new item in the work programme of CHRIS or its subsidiary bodies, the following factors should be taken into account:
 - .1 is the subject addressed by a proposal considered to be within:
 - .1 the scope of IHO objectives?
 - .2 the current IHO work programme?
 - .2 has a need for the measure proposed been identified (e.g., client demand, internal improvements)?
 - .3 do adequate industry standards or solutions exist or are they being developed thereby reducing the need for action through CHRIS?
 - .4 is the objective achievable in the existing CHRIS work program?

Establishment of priorities

- 1.4 Priorities for accepted work items should normally be assigned based on consideration of the following factors:
 - .1 measures aimed at substantially preventing maritime casualties or marine pollution incidents;
 - .2 measures to overcome identified deficiencies in existing IHO standards and technical resolutions;
 - .3 measures needed to align IHO standards and resolutions with those of other relevant international standards and recommendations;
 - .4 measures required to take into account the introduction of new technologies and methods in maritime transportation;
 - .5 measures required to take into account new measuring, surveying and production techniques in hydrography;
 - .6 measures leading to increased Hydrographic Office efficiency.
- 1.5 Follow up actions in response to specific requests emanating from the International Hydrographic Conference or other international and intergovernmental organisations should be evaluated in light of paragraph 4 above unless specifically identified as urgent matters.

General remarks

- 1.6 When setting priorities, a certain flexibility should be provided to allow for initiatives that could not be foreseen.
- 1.7 Once a decision has been made on the basis of the above for a new work item to be included in the work programme of CHRIS or a CHRIS subsidiary body, an appropriate target completion date should be established, taking into account the urgency of the matter concerned.

- 1.8 In general, proposals for new work items as well as the revised work programs raised by WG Chairs as part of their annual reports should include a proposed priority for each work item, based on the guidelines above.
- 1.9 Wherever possible, proposed priorities for work items will be considered ahead of a CHRIS meeting by a "CHRIS Chair Group" comprising Chairman, Vice chairman, Secretary and all available WG Chairs. Final endorsement of work item priorities will rest with the CHRIS and be considered at the CHRIS meeting.
- 2. CHRIS relevant elements of IHO Work Programme 2003-2007
- 2.1 IHO Programme 3. Element 3.1 Nautical Cartography
- **O 3. 1. 1** Continuation of the co-operative work on development of ECDIS services, particularly:
 - 2.1.1.1 On-going refinement and expansion of specifications and standards through the CHRIS and its working groups, with links to the CSPCWG, IEC and ISO. **[HP]**
 - 2.1.1.2 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]**
 - 2.1.1.3 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 2006], M-4, M-11, [by 2003]
- 2.2 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 2006]

CHRIS Workplan - Summary Table

CHRIS	Task	IHO	CHRIS	Projects	Priority *	Start	End	Remarks
WG		W.P.	Meeting			Date	Date	
TSMAD	A	T3.4.2	17	Develop S-100 based on ISO TC211 geo-spatial standards.	Н	2001	2007	No product specifications shall be developed unless specifically directed
TSMAD	В	O3.1.1	14	Keep S-58 Recommended ENC validation checks up to date	Н	2002	Cont	
TSMAD	С	O3.1.1	14	Support FAQ and encoding advice sections of IHO web site up to date	Н	2002	Cont	
TSMAD	D	T3.4.2	17	Develop S-57 Ed. 3.1.1 and revise ENC Product Specification	Н	2005	2006	
C&SMWG	A	T3.1.1	14	Develop S-52 App. 2 "Colours and Symbols Specifications for ECDIS", Edition 4.2 and its Annex A "Presentation Library", Edition 3.3	Н		2004	
C&SMWG	В	O3.1.1	14	Contribute to IEC TC80/WG13 symbol harmonizing work	Н		2004	
C&SMWG	С	T3.1.1	14	Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS	M		2004	
C&SMWG	D	O3.1.1	14	Introduce new website based recommendation service for good application practice of S-52	M		na	
C&SMWG	Е	O3.1.1	14	Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication	M		2004	
C&SMWG	F	T3.1.1	14	Assess the impact on S-52 C&S regulations of other IHO standards	M		2004	
DPSWG	A	O3.1.1		Complete IHO S-63 Data Protection Scheme documentation	Н	2003	2004	
DPSWG	В	O3.1.1		Publish IHO S-63 and provide support	Н	2003	2006	
DPSWG	С	O3.1.1		Monitor and support industry transition from Primar Security Scheme to IHO S-63	Н	2003	2006	
CSPCWG	A	T3.1.1	14	Revise, develop and maintain M-4	M	2001	2007	Being revised by Sections
CSPCWG	В	T3.1.1	14	Revise, develop and maintain M-11, Part A	M		2005	Integrate S-48. IHB to incorporate in M-11. IHO CL 37/2005 refers.
CSPCWG	D	O3.1.3.1	15	Development of new symbology (including depiction of Fairways, AIS-equipped AtoN)	M	2004	2006	Fairway submission to CSPCWG 2
CSPCWG	Е	O3.1.1	14	Revise supplementary documents to M-4 (INT 1, 2, 3)	M	2003	2006	New edition of INT 1 published in 2005

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^{*} H = High, M = Medium, L = Low

CHRIS	Task	IHO	CHRIS	Projects	Priority *	Start	End	Remarks
WG		W.P.	Meeting			Date	Date	
SNPWG	A	O3.1.1	15	Decide on the Data Format of digital NPs intended for use in ECDIS.	Н			
SNPWG	В	O3.1.1	15	Define the content requirements of digital NPs intended for use in ECDIS.	M			
SNPWG	С	O3.1.1	15	Develop display rules for digital NPs intended for use in ECDIS.	M			
SNPWG	D	O3.1.1	15	Draft guidance documents and revised technical resolutions.	M			
SNPWG	Е	O3.1.1	15	Liaise with other CHRIS WG's and other IHO and international bodies.	M			
HGMIO	A	O3.1.1	15	For each MIO category, describe the current status of development efforts (e.g., data or display-related)	M			
HGMIO	В	O3.1.1	15	For each MIO category, assess level of completion and further development required	L			
HGMIO	С	O3.1.1	15	Recommend to TSMAD and C&SMWG MIO-related matters that warrant consideration for inclusion in next editions of S-57 and S-52	L			

3. **TSMAD Work Plan**

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

3.1 **TSMAD Tasks**

- Α
- Develop S-100 based on ISO TC211 geo-spatial standards (IHO T3.4.2 refers) Keep S-58 Recommended ENC validation checks up to date (IHO O3.1.1 refers) В
- Support FAQ and encoding advice sections of IHO web site up to date (IHO O3.1.1 refers) \mathbf{C}
- Develop S-57 Ed. 3.1.1 and revise ENC Product Specification D

Task	Work item	Priority *	Milestones	Start	End	Status	Contact Person(s)	Affected	Remarks
		-		Date	Date	**		Pubs/Standard	

 $_{\star\star}^{\star}$ H = High, M = Medium, L = Low

* P = Planned, O = Ongoing, C = Completed

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A.1	Develop S-100 Object Catalogue.	Н		2001	Feb 06	О	Holger Bothien bo@sevencs.com		
A.2	Develop S-57 Edition 4.0 ENC product specification	L		2001	Jun.06	О	Chris Roberts Chris.Roberts@defence.gov.au		
A.3	Develop S57 Edition 4.0 Imagery and Gridded data models.	Н		2001	Feb.06	О	Don Vachon VachonDon@dfo.mpo.gc.ca		
A.4	Develop S-57 Edition 4.0 Time varying and 3-D data.	Н		2001	Oct.04	О	Jim Radice JRadice@navcen.uscg.mil		
A.5	Develop S-57 Edition 4.0 Expansion of meta data contents.	Н		2001	Jul.06	О	Tony Pharaoh apharaoh@ihb.mc		
A.6	Review of S-57 base documents.	Н		2001	Feb.06	О	Barrie Greenslade Barrie.Greenslade@ukho.gov.uk		
A.7	Develop S-57 Edition 4.0 Bathymetric Content Specification.	Н		2001		О	Lee Alexander Lee Alexander unh.edu		
A.8	Develop S-57 Edition 4.0 Portrayals (Data Depiction).	Н		2001		P	Tony Pharaoh apharaoh@ihb.mc		Not Activated
A.9	Develop S-57 to paper chart functionality and Print-on-Demand (POD) file transfer guidelines.	М		2003		P	Cameron McLeay cameron.mcleay@caris.com		Not Activated
A.10	Liaise with Non-IHO Constituents, e.g. Inland ECDIS, Marine Navigation Industry, DGIWG, AML, WMO Ice, and GIS Industry.	Н		2004	-	0	Lee Alexander lee.Alexander@unh.edu		
B.1	Keep S-58 Recommended	Н		2003	-	О	Guy Uguen Guy.uguen@shom.fr		

Task	Work item	Priority *	Milestones	Start Date	End Date	Status	Contact Person(s)	Affected Pubs/Standard	Remarks
	Validation Checks up to date								
C.1	Support FAQ and Encoding Bulletins	Н		2003	-	О	Jeff Wooton jeff.wooton@defence.gov.au		
D	Develop S-57 Ed. 3.1.1 and revise ENC Product Specification	Н		2005	2006	О			

TSMAD

Date	Location	Activity
29 Sep – 3 Oct 03	Wollongong, Australia	10th Meeting
11-12 November 04	IHB, Monaco	11 th Meeting
10-11 November 05	Wollongong, Australia	12 th Meeting

TSMAD Sub-WG

Date	Location	Activity
25-29 April 05	Univ. of NH, USA	8th Meeting
7-9 November 05	Wollongong, Australia	9 th Meeting

4. C&SMWG Work Plan

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

4.1 C&SMWG Tasks

- A Develop S-52 App. 2 "Colours and Symbols Specifications for ECDIS", Edition 4.2 and its Annex A "Presentation Library", Edition 3.3 (IHO T3.1.1 refers).
- B Contribute to IEC TC80/WG13 symbol harmonizing work (IHO O3.1.1 refers).
- C Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS (IHO T3.1.1 refers).
- D Introduce new website based recommendation service for good application practice of S-52 (IHO O3.1.1 refers).

- Е Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication (IHO O3.1.1 refers).
- Assess the impact on S-52 C&S regulations of other IHO standards (IHO T3.1.1 refers). F
- Improving ENC Consistency/loading strategies G
- Harmonisation of pick report presentation Н
- Develop Symbols for object and attribute enhancements of S-57 Edition 3.1.1 Ι
- Harmonisation with SPCWG J
- K Built a CSMWG bulletin and FAQ section on the IHO website

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
F.2	Consideration of the implications of future S100/S101 on S-52 C&S regulations	M		2003		О	Mathias Jonas Sven Herberg	S-52, App.2 S-57, Vers. 4.0	
F.3	Identify methods to incorporate symbolization into the S100 registry	M		2005		P	Mathias Jonas Pol Lebihan Sven Herberg	S-52, App. 2 S100	
G.1	Contribute and attend to a loading strategy workshop organized by ECDIS industry	М		2005		P	Mathias Jonas	S-52, App.2	
H.1	Contribute to common work	M		2005		P	Mathias Jonas	S-52, App.2	

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** P = Planned, O = Ongoing, C = Completed

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
	of SNPWG and UNH, for								
	NP3 presentation.								
I.1	Liase with TSMAD	Н		2005	2006	P	Mathias Jonas	S-52, App.2	
	for symbols for new							Annex A	
	e 3.1.1 attributes.								
J.1	Liase with CSPCWG	M		2005		О	Mathias Jonas	S-52, App.2	
								Annex A	
K.1	Establish links at IHB server	M		2005		P	Michel Huet	S-52, App.2	
								Annex A	

Date	Location	Activity
18-20 May 03	Ottawa, Canada	14 th Meeting
2-4 May 05	Rostock, Germany	15 th Meeting
29-31 May 06	IHB Monaco	16th Meeting

5. DPSWG Work Plan (April 2004)

5.1 **DPSWG Tasks**

- A
- В
- Complete IHO S-63 Data Protection Scheme documentation (IHO O3.1.1 refers). Publish IHO S-63 and provide support (IHO O3.1.1 refers). Monitor and support industry transition from Primar Security Scheme to IHO S-63 (IHO O3.1.1 refers). C

Task	Work item	Priority *	Milestones	Start	End	Status **	Contact Person(s)	Affected
				Date	Date			Pubs/Standard
A.1	Complete S-63 Test Data	Н			31.07.03	C	Jonathan Pritchard, UKHO	S-63
A.2	Review S-63 Confidentiality Agreement	Н			31.07.03	С	Tony Pharaoh, IHB	
A.3	Handover of S-63 to IHB	Н			31.07.03	C	Robert Sandvik, Primar Stavanger	S-63
B.1	Publish S-63	Н		01.08.03	01.09.03	C	Michel Huet, IHB	
B.2	Provide S-63 technical support	Н		01.08.03		0	Robert Sandvik, Primar Stavanger	
C.1	OEM S-63 transition guidelines and support	Н		01.08.03		С	Robert Sandvik, Primar Stavanger	
C.2	Review feedback from industry/users on transition guidelines and agree support activites and work plans	Н		22.06.04	23.06.04	P	Robert Sandvik, Primar Stavanger	

Date Location 22-23 June 04 IHB, Monaco

Activity

Meeting scheduled to discuss feedback from industry and users and agree specific support activities. Review feedback on current S-63 documentation.

6. CSPCWG Work Plan

- Tasks and Work Items are pursued in accordance with IHO Work Programme 2003-2007, Programme 3 (Techniques and Standards Support), Element 3.1 Nautical Cartography. In particular, the objectives:
 - o 3.1.1 the revision, development and maintenance of publications, including M-4 (Chart Specifications of the IHO & Regulations of the IHO for INT Charts) and M-11 Part A (Guidelines for INT Chart coordinators), including:
 - 3.1.1.1 the refinement and expansion of specifications and standards;
 - o 3.1.2 the development of standards for cartography and geographic information;
 - o 3.1.3 the development of the international [paper] chart series, including:
 - 3.1.3.1 the development of new symbology and
 - 3.1.3.3 the extension of the INT chart scheme.

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- The focus is on maintaining and enhancing the cartographic standards in paper charts to suit the needs of the modern mariner in support of safe navigation, whilst drawing together, wherever possible, common issues of paper/digital charting.
- As a Plan it will and should evolve; accordingly, contributions from WG members and others are welcomed at any time. This version has evolved from that produced for CHRIS 17 and at CSPCWG2; it shows progress since that plan, and includes draft plans (next milestones and dates) for continuing the work.

6.1 CSPCWG Tasks

- A Revise, develop and maintain Publication M-4 "Chart Specifications of the IHO & Regulations of the IHO for INT Charts".
- B Revise, develop and maintain Publication M-11 "Catalogue of INT Charts" (IHO T3.1.1 refers) Part A produced by CSPCWG. New format and content for M-11 agreed with IHB.
- D Development of new symbology (IHO O3.1.3.1 refers).
- E Maintenance of M-4 supplementary publications INT 1, 2 & 3.

Task	Work item	Priority	Next Milestone	Start	End	Status	Contact Person(s)	Affected	Remarks
		*		Date	Date	**		Pubs/Standard	
A.3	Revise M-4 Part B Section 200			2004	2005	С	Sec CSPCWG	M-4 / B-200	Approved 09/05 (IHO CL96/05)
A.4	Revise M-4 Part B Section 400	Н	Revise and publish	2005	2007	О	Sec CSPCWG	M-4 / B-400	B-400 divided into sub-sections
									for manageability.
A.4.1	Sub-section B-400 to B-429	Н	Publish	2005	2006	O	Sec CSPCWG	M-4 / B-400	Approved 06/06 (IHO CL48/06)
A.4.2	Sub-section B-430 to B-439	Н	WG Ltr for round 3	2005	2006	O	Sec CSPCWG	M-4 / B-400	Draft in prep with Sec/Chair
A.4.3	Sub-section B-440 to B-469	Н	WG Ltr for round 1	2006	2007	P	Sec CSPCWG	M-4 / B-400	Not started
A.4.4	Sub-section B-470 to B-499	Н	WG Ltr for round 1	2007	2007	P	Sec CSPCWG	M-4 / B-400	Not started
A.5	Revise M-4 Part B Section 300	L	Completion of A.4	2007		P	Sec CSPCWG	M-4 / B-300	Start after A.4 completed
A.6	Revise M-4 Part B Section 500	L	Completion of A.5			P	Sec CSPCWG	M-4 / B-500	Start after A.5

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A.8	New specification for Chart Maintenance section	L	1st draft			P	Sec CSPCWG	M-4	Position in M-4 to be determined. To include NM criteria, print dates, thumb labels etc (B-252 round 2 comments refer)
A.9	Annex to B-100 for colour examples	L	CSPCWG3	2006	2006	P	Sec CSPCWG	M-4	CSPCWG2 Action 16 refers.
D.3	Vessel Traffic Services guidance	L	Review of B-480	2007	2007	С	Sec CSPCWG	M-4 /B-435 & 488	Requirement from IHC XVI, to be included in review under A.4. CHRIS18 to note action now transferred to A.4.4.
D.5	Review requirement for Fairway symbology	Н	FI/Chair/Sec consultation	2004	2006	О	Vice Chairman CSPCWG	M-4, INT 1	New submission received from FI for inclusion in A.4.2
D.6	Review Wreck depth definitions	Н	Publish	2005	2006	O	Sec CSPCWG	M-4, INT 1	Included in A.4.1
D.7	Charted limits: styles, hierarchies, multi-feature lines	Н	WG Ltr for round 3 of B-430 to B-439	2005	2006	О	Sec CSPCWG	M-4 B-439	Included in A.4.2
D.8	Develop symbols for AIS- equipped AtoN			2005	2005	С	Sec CSPCWG	M-4, INT 1	Approved 12/05 (IHO CL121/05)
D.9	Develop new symbol for synchronized and sequential lights	M	Response from IALA	2005	2006	О	Sec CSPCWG	M-4, INT 1	Symbol agreed by CSPCWG2, pending consultation with IALA. Include in A.4.4
D.10	DGPS symbol			2005	2006	С	Sec CSPCWG	M-4, INT 1	Approved 06/06 (IHO CL48/06)
D.11	Reporting line			2005	2006	С	Sec CSPCWG	M-4, INT 1	Approved 06/06 (IHO CL48/06)
D.12	Boulders	Н	Publish	2005	2006	O	Sec CSPCWG	M-4, INT 1	Included in A.4.1
E.1	New edition INT 1		Publish French language version	2003	2007	О	DE: S Spohn FR: Y Le Franc ES: A Chans	INT 1	English language version published by DE 2005. French version planned for 2006, Spanish version for 2007.
E.2	New edition INT 2	M	Prepare draft new edition	2005	2007	О	NL: M de Graaf	INT 2	Input provided to NL at CSPCWG2
E.3	New edition INT 3			2005	2005	С	Sec CSPCWG	INT 3	Published 12/2005 by UK
E.4	Symbols for vacant entries in INT 1	L				P	Sec CSPCWG	INT 1, M-4 part B	
E.5	Small craft symbols	L				P	Sec CSPCWG	INT 1, M-4 part B	

CSPCWG Meetings:

1. Date: 03-05 Nov 2004 Location: IHB Monaco.
2. Date: 19-21 Oct 2005 Location: IHB Monaco.
3. Date: 22-24 Nov 2006 Location: IHB Monaco

Chairman: Peter Jones Email: peter.jones@ukho.gov.uk

Vice Chairman: Jarmo Makinen Email: jarmo.makinen@fma.fi

Secretary: Andrew Heath-Coleman. Email: andrew.coleman@ukho.gov.uk

7. SNPWG Work Plan

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

7.1 SNPWG Tasks

A Decide on the Data Format of NP-data intended for use in ECDIS (NP3).

B Define the content requirements of NP-data intended for use in ECDIS (NP3).

C Develop basic display rules for NP-data intended for use in ECDIS (NP3).

D Draft guidance documents

E Revise technical resolutions as required

F Liaise with other CHRIS WG's and other IHO and international bodies.

Task	Work item	Priority	Milestones	Start	End	Status	Contact Person(s)	Affected Pubs/Standard
		*		Date	Date	**		
A.1	Decide on the Data Structure of NPs-Data intended for use in ECDIS (NP3)	Н	Decision for a Data Structure (June 2004)	2003	2004	С	Chair/Sec SNPWG	NP3 Data should be encoded as S57-objects which were modeled in UML
A.2	Look at existing systems on the market	Н	June 2004	2003	2004	С	Chair/Sec SNPWG	
A.3	Evaluate the pros and cons	Н	June 2004	2003	2004	C	Chair/Sec SNPWG	

H = High, M = Medium, L = Low

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P = Planned, O = Ongoing, C = Completed

Task	Work item	Priority	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
B.1	Examine the content of traditional NPs	M	Content Specs (June 2004)	2004	2005	С	Chair/Sec SNPWG	Which NPs and NP data type should be included in NP3
B.2	Proposal discovery and distribution (BSH etc.)	M	Open- No deadline	2004		О	Chair/Sec SNPWG	Post discovery information on website
B.3	Draft Content Specs	Н	2006	2004	2006	О	Chair/Sec SNPWG	In time to be included in S57 Ed4
B.4	Review Data Models	M	2006	2004	2006	0	Chair/Sec SNPWG	
B.5	Prepare Proposal for TSMAD	Н	2006	2005	2006	P	Chair/Sec SNPWG	In time to be included in S100
C.1	Develop basic display rules for NP-data intended for use in ECDIS (NP3)	М	2007	2005	2007	P	Chair/Sec SNPWG	S52. Close Co-operation with CSMWG required.
D.1	Data Capture Guidance	M	2007	2006	2007	P	Chair/Sec SNPWG	S100. Document like Use of the Object Catalogue for NPs
E.1	Revised Technical Resolutions, as required	М	2007	2007	2007	P	Chair/Sec SNPWG	Technical Resolutions
F.1	Liaise with the CSMWG for the development of the display rules	M	2007	2005	2007	О	Chair/Sec SNPWG	S52
F.2	Liaise with TSMAD	M	2007	2004	2007	О	Chair/Sec SNPWG	S57
F.3	Liaise with other relevant WGs	M	2007	2004	2007			

Date	Location	Activity
7-9 June 04	NOAA, Silver Spring, MD, USA	3 rd Meeting
1-3 March 05	IHB, Monaco	4 th Meeting
24-28 October 05	Copenhagen, Denmark	5 th Meeting

8. DQWG Work Plan

This WG is currently dormant

9. HGMIO Work Plan

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. As agreed at HGMIO 2 (on 14 June 2003), the primary focus will be to assess the current status of previously developed or proposed IHO S-57 objects/attributes and display aspects for:

- Ice Information:

- Tides and Water levels;

- Oceanographic;

- Meteorological;

- Marine Environmental Protection;

- Aids to Navigation Status

Other potential topics for future investigation could include:

- Current Flow;

- Right Whales

9.1 HGMIO Tasks

A For each MIO category, describe the current status of development efforts (e.g., data or display-related), and assess level I further development required.

B Recommend to TSMAD and C&SMWG MIO-related matters that warrant consideration for inclusion in next editions of S-57 and S-52.

Task	Work item	Priority *	Milestones	Start	End	Status	Contact Person(s)	Affected
				Date	Date	**		Pubs/Standard
A.1	Ice Information	M	Work Item agreed	Fall 03	Mar 06	P	Canadian Hydrographic Service	S-57 & S-52
			at HGMIO 2				(Ottawa) John Falkingham, Ice	
							Services Canada	
A.2	Meteorological	L	Work Item agreed	Fall 03		P	Michel Huet (IHB) and	S-57 & S-52
			at HGMIO 2		Unkn.		Dan Pillich (SevenCs)	
A.3	Tides/Water Levels	L	Work Item agreed	Fall 03		P	Lee Alexander (Univ. of NH)	S-57 & S-52
			at HGMIO 2		Unkn.			
A.4	Oceanographic	L	Work Item agreed	Fall 03		P	Max van Norden (US Naval	S-57 & S-52
			at HGMIO 2		Unkn.		Oceanographic Office)	
A.5	Current Flow	L	No tasking or	-	-	-	TBD	-
			volunteer					

H = High, M = Medium, L = Low

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P = Planned, O = Ongoing, C = Completed

Task	Work item	Priority *	Milestones	Start	End	Status	Contact Person(s)	Affected
				Date	Date	**		Pubs/Standard
A.6	Aids to Navigation Status	M		Jul 05	Dec 07	О	Michel Huet	S-57 & S-52
			Work Item agreed					
			at HGMIO 3					
A.7	Marine Environmental	M		Jan 05	Jan 08	O	Julia Powell	S-57 & S-52
	Protection		Work Item agreed					
			at HGMIO 3					
B.1	Recommend to TSMAD	L	Work Item agreed	Jan 04	Unkn.	О	Lee Alexander (Univ. of NH)	S-57 Ed. 4.
	MIO-related matters that		at HGMIO 2					
	warrant consideration for							
	inclusion in next edition of S-57							
B.2	Recommend to C&SMWG	L	Work Item agreed	Jan 04		0	Lee Alexander (Univ. of NH)	S-52 App.2, Ed. 4
	MIO-related matters that		at HGMIO 2		Unkn.			
	warrant consideration for							
	inclusion in next edition of S-52							

DateLocationActivity14 June 03IHB, Monaco2nd Meeting27 June 05IHB, Monaco3rd Meeting