

**16<sup>th</sup> CHRIS MEETING  
Ottawa, Canada, 28-31 May 2004**

**CHRIS WORK PLAN  
Draft Version 1.4**

**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 where level 1 is considered as the highest.

## 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 CSPCWG, 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]**

### 1.2 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]**

**CHRIS Workplan - Summary Table**

<b>CHRIS WG</b>	<b>Task</b>	<b>IHO W.P.</b>	<b>CHRIS Meeting</b>	<b>Projects</b>	<b>Priority *</b>	<b>Start Date</b>	<b>End Date</b>	<b>Remarks</b>
TSMAD	A	T3.4.2	14	Develop S-57 Ed. 4.0 based on ISO TC211 geo-spatial standards.	H	2001	2006	No product specifications shall be developed unless specifically directed
TSMAD	B	O3.1.1	14	Keep S-58 Recommended ENC validation checks up to date	H	2002	Cont	
TSMAD	C	O3.1.1	14	Support FAQ and encoding advice sections of IHO web site up to date	H	2002	Cont	
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	H		2003	
C&SMWG	B	O3.1.1	14	Contribute to IEC TC80/WG13 symbol harmonizing work	H		2004	
C&SMWG	C	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	E	O3.1.1	14	Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication	M		2003	
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	H			
DPSWG	B	O3.1.1		Publish IHO S-63 and provide support	H			
DPSWG	C	O3.1.1		Monitor and support industry transition from Primar Security Scheme to IHO S-63	H			
CSPCWG	A	T3.1.1	14	Revise M-4	M	2001	2003	Being revised by Sections
CSPCWG	B	T3.1.1	14	Revise M-11	L		2004	Integrate S-48
CSPCWG	C	O3.1.3.2	15	Review requirement for standardization of International Notices to Mariners	M			
CSPCWG	D	O3.1.3.1	15	Development of new symbology (including depiction of ESSAs, ASLs, offshore wind farms & ATBAs, Fairways)	H		2003	
SNPWG	A	O3.1.1	15	Decide on the Data Format of digital NPs intended for use in ECDIS.	H			
SNPWG	B	O3.1.1	15	Define the content requirements of digital NPs intended for use	M			

\* H = High, M = Medium, L = Low

CHRIS WG	Task	IHO W.P.	CHRIS Meeting	Projects	Priority *	Start Date	End Date	Remarks
				in ECDIS.				
SNPWG	C	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	E	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)	H			
HGMIO	B	O3.1.1	15	For each MIO category, assess level of completion and further development required	M			
HGMIO	C	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	M			

## 2. TSMAD Work Plan

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

### 2.1 TSMAD Tasks

- A Develop S-57 Ed. 4.0 based on ISO TC211 geo-spatial standards (IHO T3.4.2 refers)
- B Keep S-58 Recommended ENC validation checks up to date (IHO O3.1.1 refers)
- C Support FAQ and encoding advice sections of IHO web site up to date (IHO O3.1.1 refers)

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A.1	Develop S-57 Edition 4.0 Object Catalogue.	H		2001	05.05	O	Holger Bothien <a href="mailto:bo@sevens.com">bo@sevens.com</a>		

\* 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.2	Develop S-57 Edition 4.0 ENC product specification	L		2001	06.06	O	Chris Roberts <a href="mailto:Chris.Roberts@defence.gov.au">Chris.Roberts@defence.gov.au</a>		
A.3	Develop S57 Edition 4.0 Raster and Matrix data models.	H		2001	11.05	O	Don Vachon <a href="mailto:VachonDon@dfo.mpo.gc.ca">VachonDon@dfo.mpo.gc.ca</a>		
A.4	Develop S-57 Edition 4.0 Time varying and 3-D data.	H		2001	10.04	O	Jim Radice <a href="mailto:JRadice@navcen.uscg.mil">JRadice@navcen.uscg.mil</a>		
A.5	Develop S-57 Edition 4.0 Expansion of meta data contents.	H		2001	10.04	O	Tony Pharaoh <a href="mailto:apharaoh@ihb.mc">apharaoh@ihb.mc</a>		
A.6	Develop S-57 Edition 4.0 Review of S-57 base documents.	H		2001	10.04	O	Barrie Greenslade <a href="mailto:Barrie.Greenslade@ukho.gov.uk">Barrie.Greenslade@ukho.gov.uk</a>		
A.7	Develop S-57 Edition 4.0 Bathymetric Content Specification.	H		2001	12.05	O	Lee Alexander <a href="mailto:Lee.Alexander@unh.edu">Lee.Alexander@unh.edu</a>		Target 2004
A.8	Develop S-57 Edition 4.0 Portrayals (Data Depiction).	H		2001	10.04	O	Tony Pharaoh <a href="mailto:apharaoh@ihb.mc">apharaoh@ihb.mc</a>		Not Activated
A.9	Develop S-57 to paper chart functionality	L		2003	10.05	P	Peter Schwarzberg <a href="mailto:pschwarzberg@caris.nl">pschwarzberg@caris.nl</a>		Not Activated
B.1	Keep S-58 Recommended Validation Checks up to date	H		2003	-	O	Guy Uguen <a href="mailto:Guy.uguen@shom.fr">Guy.uguen@shom.fr</a>		
C.1	Support FAQ and Encoding Bulletins	H		2003	-	O	Chair, TSMAD		

**Date**  
29 Sep – 3 Oct 03

**Location**  
Wollongong, Australia

**Activity**  
10th Meeting

**3. C&SMWG Work Plan (updated April 2004)**

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

**3.1 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).
- E Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale Indication (IHO O3.1.1 refers).
- F Assess the impact on S-52 C&S regulations of other IHO standards (IHO T3.1.1 refers).

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A.1	Incorporate earlier deferred amendments	H		2002	2003	C	Mike Eaton	S-52, App. 2	
A.2	Incorporate LCD calibration amendments	H		2002	2003	C	Hannu Peiponen	S-52, App. 2	
A.3	Refine Symbology (CSP) Conditional Procedures	H		2002	2003	C	Mike Eaton	S-52, App. 2	
A.4	Test refined CSP	H		2002	2003	C	Paul Lebihan	S-52, App. 2	

\* 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.5	Produce refined .DAI files (digital Version of Ed. 3.3)	H				C	Hannu Peiponen	S-52, App. 2	
A.6	Produce Test Data Set Plots for Edition 3.3	H				C	Hannu Peiponen	S-52, App. 2	
A.7	Develop a paper based description of Presentation Library Symbols Edition .3.3	M				C	Sven Herberg	S-52, App. 2	
A.8	Develop / adapt colour calibration routines for flat panel displays	M				C/O	Hannu Peiponen Falk Bethke	S-52, App. 2 IEC 61174, Ed 3	The technical progress of flat panel displays is unpredictable; calibration routines have to be reconsidered due to this progress
A.9	Set Ed. 4.2 of S-52 App.2 in force with one year grace period	H				P	Mathias Jonas Michel Huet Chris Roberts	S-52, App. 2	MS approval required
A.10	Set Ed. 3.3 of ECDIS PL (S-52 App.2, Annex A) in force with one year grace period	H				P	Mathias Jonas Michel Huet Chris Roberts	S-52, App. 2	MS approval required
A.11	Investigate the feasibility of, and develop a reduced set of colour tables	M				C	Mike Eaton Sven Herberg	S-52, App. 2	
B.1	Provide guidance to IEC TC 80 WG 13 on preferable colours and line styles	H				C	Mathias Jonas	IEC 62288	
B.2	Contribute to AIS Testbed of FGAN	H				C	Mathias Jonas Florian Motz	S-52, App. 2 IEC 62288	
C.1	Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS	M				O	Mathias Jonas	S-52, Main Doc.	
D.1	Introduce new website based recommendation service for good application practice of S-52	M				C	Chris Roberts Michel Huet	S-52, App.2	

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
E.1	Contribution to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication	M		2003	2004	C	Mathias Jonas	S-57, S-52, App. 2	
F.1	Consideration of future M-4 revision for S-52 C&S regulations	M		2003		O	Mathias Jonas Chris Roberts Peter Jones	M-4, S-52, App.2	
F.2	Consideration of the implications of future S57 Version 4.0 on S-52 C&S regulations	M		2003		P	Mathias Jonas Sven Herberg	S-52, App.2 S-57, Vers. 4.0	

**Date**                      **Location**                                      **Activity**  
some time 2005      Rostock, Germany                                      15th Meeting

#### 4. DPSWG Work Plan (updated April 2004)

##### 4.1 DPSWG Tasks

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

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
A.1	Complete S-63 Test Data	H			31.07.03	C	Jonathan Pritchard, UKHO	S-63

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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
A.2	Review S-63 Confidentiality Agreement	H			31.07.03	C	Tony Pharaoh, IHB	
A.3	Handover of S-63 to IHB	H			31.07.03	C	Robert Sandvik, Primar Stavanger	S-63
B.1	Publish S-63	H		01.08.03	01.09.03	C	Michel Huet, IHB	
B.2	Provide S-63 technical support	H		01.08.03		O	Robert Sandvik, Primar Stavanger	
C.1	OEM S-63 transition guidelines and support	H		01.08.03		C	Robert Sandvik, Primar Stavanger	
C.2	Review feedback from industry/users on transition guidelines and agree support activities and work plans	H		22.06.04	23.06.04	P	Robert Sandvik, Primar Stavanger	

Date	Location	Activity
22-23 June 04	IHB, Monaco	Meeting scheduled to discuss feedback from industry and users and agree specific support activities. Review feedback on current S-63 documentation.

## 5. CSPCWG Work Plan (Updated March 2004)

- *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: 3.1.1.1 the refinement and expansion of specifications and standards; 3.1.2 the development of standards for cartography and geographic information; 3.1.3 the development of the international [paper] chart series, including development of new symbology (3.1.3.1) and the extension of the INT chart scheme (3.1.3.3); task 3.1.1 the revision, development and maintenance of publications, including M-4 (Chart Specifications of the IHO) and M-11.*
- *This WG Plan carries forward the work of the IHO's former Chart Standardization Committee (CSC), which closed in 2002.*
- *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 is an evolution from that produced by CHRIS 15, and shows progress since that plan, and included draft plans (next milestones and dates) for continuing the work.*

## 5.1 CSPCWG Tasks

- A Revise, develop and maintain Publication M-4 “Chart Specs and Regulations for INT Charts”, including creation of digital Version (IHO T3.1.1 refers) – *Revised digital version being developed by UKHO.*
- B Revise, develop and maintain Publication M-11 “Catalogue of INT Charts” (IHO T3.1.1 refers)  
- *New format and content for M-11 agreed with IHB. Guidance under revision with CSPCWG.*
- C Review requirement for standardization of International Notices to Mariners (IHO O3.1.3.2 refers)  
- *Completed. Follow-on work item under consideration.*
- D Development of new symbology (IHO O3.1.3.1 refers) – *see table below.*

Task	Work item	Priority*	Next Milestone	Start Date	End Date	Status**	Contact Person(s)	Affected Pubs/Standard	Remarks
A.1	Revise M-4 Part C	M				C		M-4 / C	Issued by IHB CL 38/03
A.2	Revise M-4 Part B Section 100	M	Assess responses to CL 06/2004	2003	2004	O	Sec CSPCWG	M-4 / B / 100	CL 06/2004, responses required by 11/05/04
A.3	Revise M-4 Part B Section 200	M	Draft	2004	2005	P	Sec CSPCWG	M-4 / B / 200	Not started
A.4	Revise M-4 Part B Section 400	M					Sec CSPCWG	M-4 / B / 400	After A.1-A.3 (in sub-sections)
A.5	Revise M-4 Part B Section 300	L					Sec CSPCWG	M-4 / B / 300	After A.1-A.3 (in sub-sections)
A.6	Revise M-4 Part B Section 500	L				P	Sec CSPCWG	M-4 / B / 500	After A.1-A.3
A.7	Revise M-4 Part B Section 600	none					Sec CSPCWG	M-4 / B / 600	Lattice charts obsolescent
B.1	Review S-48 and amalgamate within M-11	L	Assess responses to CL 30/2004	2004	2004	O	Sec CSPCWG	M-11 (& S-48)	CL 03/2004, responses required by 13/04/04
C.1	Review requirement for the standardization of International Notices to Mariners	M	CHRIS 16 approval of action				Chair CSPCWG		CL 08/2004. Requirement reviewed. Potential follow-on task C.2: Collation of criteria for NMs
D.1	Review and develop depiction of ESSAs (including PSSAs & ATBAs)	H	Approval by M/S	2003	2004	O	Sec CSPCWG	M-4 /B-437, INT 1	CLs 04/2003, 07/2004. Ready for IHB to advise M/S of proposed symbols.
D.2	Develop new symbology: ASLs	H	Approval by M/S	2003	2004	O	Sec CSPCWG	M-4 /B-432, 434-436, INT 1	CLs 03/2003, 01/2004. Ready for IHB to advise M/S of proposed symbols
D.3	Vessel Traffic Services guidance	M					Sec CSPCWG	M-4 /B-435 & 488	Requirement not identified, include review under A.4
D.4.1	Review and develop depiction of	M	Assess responses	2004	2004	O	Sec CSPCWG	M-4, INT 1	CL 02/2004 responses required

Task	Work item	Priority*	Next Milestone	Start Date	End Date	Status**	Contact Person(s)	Affected Pubs/Standard	Remarks
	offshore wind farms (and other offshore renewables)		to CLs 02/2004						by 29/03/04
D4.2	Review symbology for Restricted Areas (inc Activities Inadvisable)	M	Assess responses to CLs 04/2004	2004	2004	O	Sec CSPCWG	M-4, INT 1	CL 04/2004 responses required by 27/04/04
D.5	Review requirement for Fairway symbology	M	Revised proposal	2004	2005	P	Vice Chairman CSPCWG	M-4, INT 1	Requirement under review by FI/SE HOs
D.6	Review Wreck depth definitions	L		2004		P	Sec CSPCWG	M-4, INT 1	Not started

**Date**                      **Location**                                      **Activity**  
3-5 Nov 2004              Monaco    1<sup>st</sup> WG Meeting

**6. SNPWG Work Plan** ([updated April 2004](#))

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

**6.1 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 Date	End Date	Status**	Contact Person(s)	Affected Pubs/Standard
A.1	Look at existing systems on the market	H		2003	2004	O	Chair/Sec SNPWG	
A.2	Evaluate the pros and cons	H	Decision for a Data Format	2003	2004	O	Chair/Sec SNPWG	
B.1	Examine the content of traditional NPs	M		2004	2004	O	Chair/Sec SNPWG	
B.2	Proposal discovery and distribution (BSH etc.)	M		2004	2004	O	Chair/Sec SNPWG	
B.3	Draft Content Specs	M	Content Specs	2004	2005	P	Chair/Sec SNPWG	
C.1	Develop basic display rules for NP-data	M	Display rules	2004	2005	P	Chair/Sec SNPWG	S52
D.1	Extension to ENC Product Specifications	M	Guidance Docs	2005	2005	P	Chair/Sec SNPWG	S57
D.2	Coding Guide for NP-data for ENC	M	Guidance Docs	2005	2005	P	Chair/Sec SNPWG	
D.3	Draft S?? (if necessary)	M	S??	2005	2005	P	Chair/Sec SNPWG	
E.1	Draft revised Technical Resolutions	M	Revised TRs (Dec 04)	2005	2005	P	Chair/Sec SNPWG	Technical Resolutions
F.1	Prepare a proposal for TSMAD	M	TSMAD-Proposal	2005	2005	P	Chair/Sec SNPWG	S57
F.2	Liaise with CSMWG for the development of the display rules	M		2005	2005	P	Chair/Sec SNPWG	S52
F.3	Liaise with other relevant WGs	L		2004	2005	P		

**Date**                      **Location**                      **Activity**  
7-9 June 04                      NOAA, Silver Spring, MD, USA                      3<sup>rd</sup> Meeting

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

## **7. DQWG Work Plan**

This WG is currently dormant

## 8. 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

Other potential topics for future investigation could include:

- Current Flow ;
- Marine Environmental Protection ;
- Marine Habitats ;

### 8.1 HGMIO Tasks

- A For each MIO category, describe the current status of development efforts (e.g., data or display-related).
- B For each MIO category, assess level of completion and further development required.
- C 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 Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
<b>A</b>	<b>Describe current status of development efforts</b>							
A.1	Ice Information	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Canadian Hydrographic Service (Ottawa) and Baltic Ice Centre (BSH)	S-57 & S-52
A.2	Meteorological	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Michel Huet (IHB) and Jana Schulze (SevenCs)	S-57 & S-52
A.3	Tides/Water Levels	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Lee Alexander (Univ. of NH)	S-57 & S-52

\* H = High, M = Medium, L = Low

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

<b>Task</b>	<b>Work item</b>	<b>Priority *</b>	<b>Milestones</b>	<b>Start Date</b>	<b>End Date</b>	<b>Status **</b>	<b>Contact Person(s)</b>	<b>Affected Pubs/Standard</b>
A.4	Oceanographic	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Max van Norden (US Naval Oceanographic Office)	S-57 & S-52
A.5	Current Flow	L	No tasking or volunteer	-	-	-	TBD	-
A.6	Marine Habitats	L	No tasking or volunteer	-	-	-	TBD	-
A.7	Environmental Protection	L	No tasking or volunteer	-	-	-	TBD	-
<b>B</b>	<b>Assess level of completion and further development required</b>							
B.1	Ice Information	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Canadian Hydrographic Service (Ottawa) and Baltic Ice Centre (BSH)	S-57 & S-52
B.2	Meteorological	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Michel Huet (IHB) and Jana Schulze (SevenCs)	S-57 & S-52
B.3	Tides/Water Levels	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Lee Alexander (Univ. of NH)	S-57 & S-52
B.4	Oceanographic	M	Work Item agreed at HGMIO 2	Fall 03	Mar 04	P	Max van Norden (US Naval Oceanographic Office)	S-57 & S-52
B.5	Current Flow	L	No tasking or volunteer	-	-	-	TBD	-
B.6	Marine Habitats	L	No tasking or volunteer	-	-	-	TBD	-
B.7	Environmental Protection	L	No tasking or volunteer	-	-	-	TBD	-
C.1	Recommend to TSMAD MIO-related matters that warrant consideration for inclusion in next edition of S-57	M	Work Item agreed at HGMIO 2	Jan 04	Mar 04	P	Lee Alexander (Univ. of NH)	S-57 Ed. 4.
C.2	Recommend to C&SMWG MIO-related matters that warrant consideration for inclusion in next edition of S-52	M	Work Item agreed at HGMIO 2	Jan 04	Mar 04	P	Lee Alexander (Univ. of NH)	S-52 App.2, Ed. 4

**Date** 14 June 03      **Location** IHB, Monaco      **Activity** 2<sup>nd</sup> Meeting

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\* H = High, M = Medium, L = Low

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