

**1st IHO-HSSC Meeting
The Regent Hotel, Singapore, 22-24 October 2009**

**CONSOLIDATED HSSC WORK PLAN
Draft WP 2009-2010**

Objective:

This work plan aims at ensuring efficient project resource management and alignment, progress monitoring and to provide a communication utility with internal and external parties.

Rationale:

The justification for the HSSC Work Plan is in conformance with the IHO Strategic Plan, and mainly related to the following elements of the IHO Work Programme – 2008-2012:

- Element 3.1 Meetings of Committees and Working Groups
- Element 3.3 Nautical Cartography and Marine Data Management
- Element 3.5 Data for Geomatics Application

Revisions:

Chairs of each working group, along with the HSSC Chair, will meet prior to each HSSC meeting to review progress, and to harmonize the work plan.

Approval:

Once revised, the work plan will be approved by the HSSC plenary at each annual meeting. WG Chairmen will present an updated WP on the last day of HSSC meetings, incorporating the agreed changes discussed during that meeting. Completed work items should be removed from WPs after they have been reported at a subsequent HSSC meeting. A revised consolidated HSSC Work Plan (WP) incorporating all approved additional WP items will be circulated to participants of the meeting for final comment at the same time as the draft minutes of the meeting. HSSC Chair could seek committee members' interim approval for emerging issues between meetings.

Communications:

The HSSC Work Plan 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 HSSC meeting that approved the inclusion of the task will be identified in the HSSC Work Plan summary. Each WG sub task will be numbered using an alphanumeric sequence, "An, Bn, Cn.."

Priorities:

Three Levels of Priorities (H, M, and L) will be assigned by HSSC using the "Guidelines for the Evaluation of Proposed New Work Items for HSSC and its Subordinate Bodies" (see section 1 hereafter).

1. GUIDELINES FOR THE EVALUATION OF PROPOSED NEW WORK ITEMS FOR HSSC AND ITS SUBSIDIARY BODIES

Introduction

- 1.1 In order to best use the limited resources available to HSSC and its subordinate bodies, it is necessary to evaluate and prioritise proposed new work items. These guidelines are based on the principles originally agreed at CHRIS/13 and CHRIS/15 and revised and enhanced at CHRIS/18. They are intended to provide a uniform basis for evaluation and prioritisation.
- 1.2 Evaluation should be done as a two-stage process:
- a. general consideration leading to acceptance or rejection; and if accepted,
 - b. establishment of priorities.

General acceptance

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

Establishment of priorities

- 1.4 Priorities for accepted work items should normally be assigned based on consideration of the following factors:
- a. measures aimed at substantially preventing maritime casualties, marine pollution incidents or enhancing maritime security
 - b. measures to overcome identified deficiencies in existing IHO standards and technical resolutions;
 - c. measures needed to align IHO standards and resolutions with those of other relevant international standards and recommendations;
 - d. measures required to take into account the introduction of new technologies and methods in maritime operations;
 - e. measures required to take into account new techniques in data acquisition, processing and management, and production techniques in hydrography;
 - f. measures leading to increased Hydrographic Office efficiency.
- 1.5 Follow up actions in response to specific requests 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, 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 HSSC and its subordinate bodies, 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 meeting by a "Chair Group" comprising Chairman, Vice chairman, Secretary and all available Working Group Chairs. Final endorsement of work item priorities will rest with HSSC and be considered at the respective meeting.

2. HSSC RELEVANT ELEMENTS OF IHO WORK PROGRAMME 2008-2012

- Notes:
- 1) Each time CHRIS is mentioned in this section, it should be understood as HSSC, i.e. its successor. Similarly, CSMWG should be understood as DIPWG.
 - 2) HGMIO has been withdrawn as an HSSC WG in 2008 and Task 3.1.7 has therefore become inapplicable.
 - 3) Publications M-4 and M-11 (re: Task 3.3.1) have been renamed S-4 and S-11, respectively.
 - 4) Publication M-15 (re: Task 3.1.3) has been discontinued.

2.1 IHO Programme 3. Element 3.1 - Meetings of Committees and Working Groups

Objective

Achieve the requirements of the IHO Work Program through the coordination and interaction of the relevant Committees and Working Groups.

- Task 3.1.1 Committee on Hydrographic Requirements for Information Systems (CHRIS [now, HSSC])**
The CHRIS [now, HSSC] Chairman, with the support of the IHB as needed, to organize, prepare and conduct the meetings scheduled annually 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS.
- Task 3.1.2 Transfer Standard Maintenance and Application Development Working Group (TSMAD)**
The Chairman of the TSMAD WG under the guidance of CHRIS [now, HSSC] and with IHB support as needed, to organize, prepare and conduct the meetings scheduled each six months during the period 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS. To keep the following IHO publications updated: S-58, S-61, S-~~6562~~ and S-~~6463~~; this last one in coordination with CSMWG [now, DIPWG] and DPSWG. TSMAD Sub WGs, to meet as required.
- Task 3.1.3 Chart Standardization and Paper Chart Working Group (CSPCWG)**
The Chairman of the CSPCWG under the guidance of CHRIS [now, HSSC] and with IHB support as needed, to organize, prepare and conduct the meetings annually 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS. ~~To keep IHO publication M-15 – List of Booklets on Chart Symbols updated.~~ CSPCWG Sub WGs to meet as required.

Task 3.1.4 Colours and Symbols Maintenance Working Group (CSMWG [now, DIPWG])

The Chairman of the CSMWG [now, DIPWG] under the guidance of CHRIS [now, HSSC] and with IHB support as needed, to organize, prepare and conduct the meetings annually 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS. To keep IHO publication S-64 updated, in coordination with TSMAD and DPSWG.

Task 3.1.5 Standardization of Nautical Publications Working Group (SNPWG)

The Chairman of the SNPWG under the guidance of CHRIS [now, HSSC] and with IHB support as needed, to organize, prepare and conduct the meetings as required during the period 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS. SNPWG Sub-WGs to meet as required.

Task 3.1.6 Data Protection Scheme Working Group (DPSWG)

The Chairman of the DPSWG under the guidance of CHRIS [now, HSSC] and with IHB support as needed, to organize, prepare and conduct the meetings as required during the period 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS. To keep IHO publication S-63 updated.

~~**Task 3.1.7 IHO-IEC Harmonizing Group on Marine Information Objects (HGMIO)**~~

~~The Chairman of the HGMIO under the guidance of CHRIS and with IHB support as needed, to organize, prepare and conduct the meetings as required during the period 2008-2012, to coordinate and execute the detail of approved IHO WP items and to consider issues and provide guidance and advice to relevant organizations, bodies and MS.~~

2.2 IHO Programme 3. Element 3.3 - Nautical Cartography and Marine Data Management**Objective**

Facilitate worldwide quality nautical charting coverage to suit the needs of the mariner in support of safe and efficient navigation through the development of specifications and standards for the production, distribution and updating of cartographic products and supporting publications.

Task 3.3.1 Nautical Publications

Revise, develop and maintain the following IHO publications, with the support of consultants as required (2008-2012 ongoing):

- a) S-4M-4 2008-2012 ongoing
- b) S-11M-11 2008-2012 ongoing
- c) S-52 2008-2012 ongoing
- d) S-57 2008
- e) S-100 2008
- f) S-101 2012
- g) S-10X 2012
- h) INT 1, INT2 and INT3

Task 3.3.2 Digital Data Protection

CHRIS [now, HSSC] to provide support to users on the implementation and operation of the IHO data protection scheme S-63 (2008-2012). To develop and maintain S-63 with support for S-101 and other relevant specifications based on S-100 (2012). To provide IHB with support to operate the scheme as scheme administrator (2008-2012).

Task 3.3.3 Liaison and cooperation with other organizations.

CHRIS [now, HSSC] to develop and maintain contact with relevant organizations to harmonize standards, to avoid potential conflicts, to anticipate development and to maximise the quality and availability of adequate nautical products and services. To invite participants to attend appropriate IHO forums (eg. Open ECDIS Forum) and to participate in governmental and non governmental groups such as: IEC/TC80, ISO TC211, DGIWG, GSDI, ICA Commission on Spatial Data Standards, GNSS-ICG. (2008-2012)

2.3 IHO Programme 3. Element 3.5 - Data for Geomatics Application

Objective

Facilitate the optimal use of hydrographic data for purposes other than navigation.

Task 3.5.1 Development of Standards

CHRIS [now, HSSC] to develop processes under which Hydrographic Data and Exchange Products Specifications may be created under S-100. (2008-2009) To develop standards for coastal zone hydrographic surveys in support of coastal zone management, protection of the environment and natural hazards (e.g. tsunamis). (2008-2012)

Task 3.5.2 Maritime Spatial Data Infrastructure

CHRIS [now, HSSC] to monitor global geomatics development, especially those connected with coastal zone data management and the development of national, regional and global spatial data infrastructure and to provide guidance to MS as appropriate.(2008-2012)

HSSC Work Plan - Summary Table

HSSC WG	Task	IHO W.P.	CHRIS/HSSC Meeting	Projects	Priority H-high M-medium L-low	Start Date	End Date	Remarks
TSMAD	A	T3.3.1	CHRIS 17	Develop S-100 based on ISO TC211 geo-spatial standards	H	2001	2010	No product specifications shall be developed unless specifically directed
TSMAD	B	T3.1.2	CHRIS 14	Keep S-58 <i>Recommended ENC validation checks</i> up to date	H	2002	Cont	
TSMAD	C		CHRIS 14	Support FAQ and encoding advice sections of IHO web site up to date	H	2002	Cont	
TSMAD	D	T3.1.2	HSSC1	Keep S-65 <i>ENC Production Guidance</i> up to date	M	2009		
TSMAD	E		HSSC1	Study the possibility to encode information features as New Objects (see S-57 supplement) to avoid caution area objects (CNTARE) in some cases, e.g. to encode T&Ps	M	2010		
DIPWG	A	T3.3.1	CHRIS 14	Maintain S-52 and its associated "Presentation Library"	H	2002	Cont	
DIPWG	B	T3.3.3	CHRIS 14	Contribute to IEC TC80/WG13 symbol harmonizing work	H	2002	2008	
DIPWG	C	T3.3.1	CHRIS 14	Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS	M	2002	2010	
DIPWG	D		CHRIS 14	Introduce new website based recommendation service for good application practice of S-52	M	2002	2008	
DIPWG	E		CHRIS 14	Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication.	M	2002	Cont	
DIPWG	F		CHRIS 14	Assess the impact of other IHO standards on S-52 C&S regulations	M	2002	2012	
DIPWG	G		CHRIS 18	Improving ENC Consistency/loading strategies.	M	2006	Cont	
DIPWG	H		CHRIS 17	Harmonisation of pick report presentation	M	2005	2008	
DIPWG	I	T3.3.1	CHRIS 18	Develop Symbols for object and attribute enhancements of S-57 Edition 3.1.1	M	2006	2008	Task completed
DIPWG	J		CHRIS 17	Harmonisation with CSPCWG.	M	2005	Cont	
DIPWG	K		CHRIS 16	Maintain the DIPWG bulletin and FAQ section on the IHO website.	M	2004	Cont	

HSSC WG	Task	IHO W.P.	CHRIS/HSSC Meeting	Projects	Priority H-high M-medium L-low	Start Date	End Date	Remarks
DIPWG	L		HSSC 1	Investigate enhancing the appearance of existing traditional paper chart symbols used in ECDIS by modifying their size, shape and colour.	M	2009		
DIPWG	M		HSSC 1	Develop symbology for portrayal of nautical publications in ECDIS.	M	2009		
DPSWG	A	T3.3.2	CHRIS 18	Prepare S-63 edition 1.1 to provide a more precise description for a compliant implementation of the data protection scheme.	H	2006	2009	Edition 1.1 published March 2008 (CL36/2008 refers)
DPSWG	B	T3.3.2	CHRIS 18	Provide technical and operational support to Data Servers and OEMs developing or operating systems or services compliant with S-63.	H	2003	Cont.	
DPSWG	C			Produce new edition of S-63 to complement S-101	M	2009		
CSPCWG	A	T3.3.1	CHRIS 14	Revise, develop and maintain Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts'	M	2003	2010	Being revised by Sections
CSPCWG	B	T3.3.1	CHRIS 14	Revise, develop and maintain Publication S-11 'Catalogue of INT Charts' Part A maintained by CSPCWG	M		2010	
CSPCWG	D		CHRIS 15	Development of new (and revised) symbology	M	2004	2010	Undertaken as they emerge
CSPCWG	E	T3.3.1	CHRIS 14	Maintenance of S-4 supplementary publications INT 1, 2 & 3	L	2003		
CSPCWG	F	T3.3.1	CHRIS 19	Revise, develop and maintain S-49 'Recommendations concerning Mariners' Routeing Guides'	M	2008	2010	Sub-WG led by DE
SNPWG	A		CHRIS 15	Decide on the Data Format of NP-data intended for use in ECDIS (NP3)	H	2003	2004	Task completed
SNPWG	B		CHRIS 15	Define the content requirements of NP-data intended for use in ECDIS (NP3).	H	2004	Open	
SNPWG	C		CHRIS 15	Develop test data sets	H	2008	2010	
SNPWG	D		CHRIS 15	Develop basic display rules for NP-data intended for use in ECDIS (NP3)	M	2008	2010	
SNPWG	E		CHRIS 15	Draft guidance documents.	H	2008	Open	
SNPWG	F		CHRIS 15	Revise technical resolutions as required.	H	2007	2008	Task completed
SNPWG	G		CHRIS 15	Liaise with other HSSC WG's and other IHO and international bodies.	H	2004	Cont.	
SNPWG	H		HSSC 1	Address the remaining work in former TSMAD Work Item D "Develop Marine Environment Protection Programme based on S-100"	L	2011	2012	

HSSC WG	Task	IHO W.P.	CHRIS/HSSC Meeting	Projects	Priority H-high M-medium L-low	Start Date	End Date	Remarks
DQWG	A		CHRIS 19	Review ISO 19113, Geographic Information-Quality Principles, ISO 19114, Geographic Information-Quality Evaluation Procedures, and ISO 19115, Geographic Information - Metadata and propose relevant enhancements and amendments for incorporation in S-100.	L	2010	-	
DQWG	B		CHRIS 19	Monitor and further develop quality indicators for hydrographic data.	H	2009	2010	
DQWG	C		CHRIS 19	Review and revise as needed existing S-57 quality indicators, including the education of both the mariner and the cartographer, and the development of documentation.	H	2008	2009	
DQWG	D		CHRIS 19	Review and revise as needed the presentation of data quality, as provided in S-52 and its Presentation Library.	M	2010	2010	
DQWG	E		CHRIS 19	Investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner on the quality of the underlying survey data, through appropriate use of the attribute CATZOC and/or improvement of the existing display capabilities.	M	2010	2012	
DQWG	F		CHRIS 19	Propose new data quality topics and other applications for consideration by HSSC.	L	2010	-	
MSDIWG	A		HSSC1	Prepare IHO Road Map to support MS' capability development in MSDI	M/H	2010	2010	
MSDIWG	B		HSSC1	Monitor national and international marine SDI activities and liaise to increase visibility	M	2010	2010	
MSDIWG	C		HSSC1	Prepare detailed work plan based on new Terms of Reference	H	2010	2010	
TWLWG	A	T3.2.4		Maintain Standard Tidal Constituent List	H		Cont.	
TWLWG	B			Prepare a Standard for Digital Tide Tables	H	2007	2011	
TWLWG	C		CHRIS 20 HSSC 1	Liaise with TSMAD on tidal matters relevant to the Dynamic Application of Tides in ECDIS and develop a Standard of the transmission of real-time tidal data	H	2009	2010	
TWLWG	D			Monitor and assist in the preparation of English translation of the Tidal Manual prepared by the Institut Océanographique and SHOM	H	2003	2010	

HSSC WG	Task	IHO W.P.	CHRIS/HSSC Meeting	Projects	Priority H-high M-medium L-low	Start Date	End Date	Remarks
TWLWG	E			Review the various definitions of MSL and their relevance to Hydrographic Offices and review the IHO tidal resolutions to ensure that they are compatible with the requirements of non tidal areas such as the Baltic Sea	H	2009	2010	
TWLWG	F			Prepare and maintain an inventory of tide gauges used by Member States and to publish it on the IHO/TWLWG web site	H	2009	2010	
TWLWG	G			Prepare structure and contents for a short course (maximum 5 days) on "Tides for hydrography" for the Capacity Building Sub Committee	H	2009	2009	
HDWG	A			Review and update the definitions in the IHO Dictionary in French English and Spanish	M	2010	2011	
HDWG	B			Liaise with other IHO bodies preparing publications containing glossaries	H	2009	2011	
HDWG	C			Liaise with other organizations developing dictionaries and/or glossaries				
EUWG	A		HSSC1	Review and revise Appendix 1 to S-52 for incorporation in S-65	H	2009	2010	
EUWG	B		HSSC1	Review the status of RNW on ECDIS for recommendations	H	2009	2010	
EUWG	C		HSSC1	Submit a report, any recommendations, and a final draft of the revised text to the HSSC in 2010 for its consideration	H	2009	2010	
ABLOS	A	T3.6.1		Organise the 6 th ABLOS Conference in 2010	H	2009	2010	
ABLOS	B	T3.6.2		Maintain IHO Publication C-51 (formerly S-51) "Technical Aspects of the Law of the Sea (TALOS) Manual"	H	2009	2011	
ABLOS	C	T3.6.3		Prepare a standard training program on the hydrographic aspects of maritime delimitation	H	2009	2010	
ABLOS	D	T3.6.1		Organise the 7 th ABLOS Conference in 2012	H	2011	2012	
ABLOS	E	T3.1.16		Provide advice and guidance on the technical aspect of the Law of the Sea to relevant organizations, bodies and Member States	H		Cont.	

3. TSMAD WORK PLAN

3.1 TSMAD Tasks

- A Develop S-100 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)
- D Keep S-65 *ENC Production Guidance* up to date
- E Study the possibility to encode information features as New Objects (see S-57 supplement) to avoid caution area objects (CNTARE) in some cases, e.g. to encode T&Ps

Task	Work item	Priority*	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A	S-100	H	Draft Version published March 2008, S-100 Editing Committee Meeting Sept 2009	2001	2010	O	Barrie Greenslade		
A..2	Develop S-101 ENC product specification	M		2006	2012	O	Julia Powell, Richard Fowle		
A. 6d	Develop S-100 Encoding Component	H				O	Barrie Greenslade		
A..7	Develop S-100 Bathymetric Content Specification.	H		2001		O	Wade Ladner		
A..8	Develop S-100 Portrayal Component	H		2006		O	DIPWG		

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

Task	Work item	Priority*	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
A.10	Liaise with Non-IHO Constituents, e.g. Inland ECDIS, Marine Navigation Industry, DGIWG, AML, WMO Ice, and GIS Industry.	H		2004	-	O			
A.11	Assist UN-DOALOS in the development of an S-100 compliant product specification for a Law of the Sea feature code directory								
A.12	Develop an S-10X product specification for 'Auxiliary Informational Layer Integration'	M							
A.13	Investigate a suitable grid referencing system for S-100	L							
A.14	Develop a template Product Specification for Marine Information Overlays (MIO)	M							
B.1	Keep S-58 Recommended Validation Checks up to date	H		2003	-	O	Guy Uguen		
C.1	Support FAQ and Encoding Bulletins	H		2003	-	O	Jeff Wooton		
D.1	Keep S-65 <i>ENC Production Guidance</i> up to date	M		2009	-	O			

Task	Work item	Priority*	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard	Remarks
E.1	Study the possibility to encode information features as New Objects (see S-57 supplement) to avoid caution area objects (CNTARE) in some cases, e.g. to encode T&Ps	M							

3.2 TSMAD Meetings (IHO T3.1.2 refers)

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
18-22 September 06	Wellington, New Zealand	13 th Meeting
4-8 June 07	UKHO, Taunton	14 th Meeting
14-18 January 08	IHB, Monaco	15 th Meeting
5-9 May 08	Cape Town, South Africa	16 th Meeting
8-12 September 08	Seattle, USA	17 th Meeting
4-8 May 09	Ottawa, Canada	18 th Meeting
26-30 Oct 09	Sydney, Australia	19 th Meeting

TSMAD S-100 Sub-WG

Date	Location	Activity
25-29 April 05	Univ. of NH, USA	1 st Meeting
7-9 November 05	Wollongong, Australia	2 nd Meeting
15-19 May 06	Brest, France	3 rd Meeting
18-22 September 06	Wellington, New Zealand	4 th Meeting
27-1 December 06	Silver Spring, USA	5 th Meeting
23-27 April 07	Ottawa, Canada	6 th Meeting
17-21 September 07	Hamburg, Germany	7 th Meeting
2-4 September	Taunton, UK	8 th Meeting

Chairman: Barrie GREENSLADE, UK

Email: Barrie.Greenslade@UKHO.gov.uk

Vice Chairman: Jean-Luc DENIEL, France

Email: deniel@shom.fr

Secretary: Anthony PHARAOH, IHB

Email: apharaoh@ihb.mc

4. DIPWG WORK PLAN

The proposed work plan below closes three work items (C.1, C.3 & K.1) that have been completed, retains four ongoing work items (A.2, C.2, F.2 & J.1), and recommends starting six new work items (A.1, A.4, F.3, F.4, K.2 & K.3) to focus DIPWG efforts in the future. The work to be undertaken within each of the proposed work items is described in the remarks section.

This work plan extends the trend established in the previous plan to continue routine maintenance of the existing S-52 standard while broadening our support for the development of S-100, S-101 and the Geospatial Information Infrastructure Portrayal Register. This plan also recommends that the task category I, "Develop Symbols for object and attribute enhancements of S-57 Edition 3.1.1," be deleted altogether as all work on this task has been completed and no additional work items under this task are anticipated.

4.1 DIPWG Tasks

- A Maintain S-52 and its associated “Presentation Library” (IHO T3.3.1 refers)
- B Contribute to IEC TC80/WG13 symbol harmonizing work (IHO T3.3.3 refers)
- C Examination of S-52 main documents and annexes for redundant operational aspects of ECDIS (IHO T3.3.1 refers)
- D Introduce new website based recommendation service for good application practice of S-52 (IHO T3.3.1 refers)
- E Contribute to harmonised rules for ENC loading strategy, use of SCAMIN and overscale indication
- F Assess the impact of other IHO standards on S-52 C&S regulations [**The wording of this task has been reordered for the sake of clarity**]
- G Improving ENC Consistency/Loading strategies
- H Harmonisation of pick report presentation
- I Develop Symbols for object and attribute enhancements of S-57 Edition 3.1.1(IHO T3.3.1 refers) [**All work on this task has been completed. Recommend deleting this category**]
- J Harmonisation with CSPCWG
- K Maintain the DIPWG bulletin and FAQ section on the IHO website
- L Investigate enhancing the appearance of existing traditional paper chart symbols used in ECDIS by modifying their size, shape and colour.
- M Develop symbology for portrayal of nautical publications in ECDIS.

Task	Work Item	Priority H-high M-medium L-low	Mile- stones	Start Date	End Date	Status P-planned O-ongoing C-Completed	Contact Person	Affected Pubs/Standard	Remarks
A.1	Resolve any problems or errors identified in S-52 and its Presentation Library as appropriate	H		2009	-	O	Colby Harmon Julia Powell	S-52	New Work Item This addresses the routine maintenance of S-52.
A.2	Implementation of changed requirements of revised IMO ECDIS Performance Standards into S-52 Colours & Symbols regulations	H		2006	2010	O	Colby Harmon	S-52	Continuing Work Item The final draft of S-52, Ed. 6, has been distributed for comment through IHO Circular Letter 34/2009, which requests feedback by 18 Sept. 2009. After comments have been addressed, S-52, Edition 6 will be released.

Task	Work Item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-Completed	Contact Person	Affected Pubs/Standard	Remarks
A.4	Issue Maintenance Document No. 8 of S-52.	M		2009	2010	P	Colby Harmon Mathias Jonas	S-52	New Work Item It is expected that MD8 will: - Clarify the portrayal of certain wrecks and obstructions - Resolve some issues with the ECDIS Chart 1 - Add "Unknown" as a valid enumerate value in the Presentation Library Look-up Tables to differentiate between unknown and unpopulated (null) attribute values.
C.2	Liaise with IEC to harmonize the resulting new draft of S-52 with IEC61174 and IEC62288 through the Chairman of IEC/TC80.	H		2008	2010	O	Mathias Jonas	S-52	Continuing Work Item IEC/TC80 has been alerted to the pending changes to S-52. This work item addresses any ongoing coordination to clarify any questions that IEC may have.
F.2	In close liaison with TSMAD, set up a portrayal register within the S100 registry	H		2005	2012	O	Colby Harmon Pol Lebihan Julia Powell	S-52 S-100 Portrayal Register	Continuing Work Item This work item will refine and expand the initial development of Portrayal and Symbol Models that will ultimately become part of the Geospatial Information Infrastructure Portrayal Register.
F.3	Assist TSMAD in identifying which aspects of S-52 should be incorporated into the S-101 Specification.	H		2009	2010	P	Colby Harmon Julia Powell	S-101	New Work Item This assists TSMAD in writing Section 9 of the S-100 standard, which describes portrayal.
F.4	Develop proposal to refine and clarify the governance for each portrayal component (Standards, Specifications & Registers) of S-100 & S-101.	H		2009	2010	P	Colby Harmon Julia Powell	S-100 S-101	New Work Item This work item will result in a recommendation to the HSSC regarding how configuration control and maintenance of the various portrayal components of S-100 should be governed.

Task	Work Item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-Completed	Contact Person	Affected Pubs/Standard	Remarks
J.1	Liaise with CSPCWG	M		2009	-	O	Colby Harmon Jeff Wootton	S-52 S-100 Portrayal Register	Continuing Work Item This work item will review and address, as appropriate, any changes in paper chart portrayal standards, in close coordination with TSMAD.
K.2	Maintain Chart Presentation Bulletins on the DIPWG page of IHO website	M		2008	-	O	Colby Harmon Michel Huet		New Work Item This work item addresses the routine posting of CPBs on the IHO website.
K.3	Review and revise other informational on the DIPWG page of IHO website	L		2008	-	O	Colby Harmon Michel Huet		New Work Item This work item addresses the continual improvement of the DIPWG page on the IHO website.
L.1	Investigate enhancing the appearance of existing traditional paper chart symbols used in ECDIS by modifying their size, shape and colour.	L		2009		P			New Work Item
M.1	Develop symbology for portrayal of nautical publications in ECDIS.	M		2009		P			New Work Item

4.2 DIPWG Meetings (IHO T3.1.4 refers)

Date	Location	Activity
18-20 May 03	Ottawa, Canada	14 th CSMWG Meeting
2-4 May 05	Rostock, Germany	15 th CSMWG Meeting
29-31 May 06	IHB Monaco	16 th CSMWG Meeting
11-13 June 07	Stavanger, Norway	17 th CSMWG Meeting
7-9 May 08	Cape Town, South Africa	18 th CSMWG Meeting
4-8 May 09	Ottawa, Canada	1 st DIPWG Meeting
3-7 May 2010	Rostock, Germany	2 nd DIPWG Meeting

Chairman: Colby HARMON, USA
 Vice Chairman: Julia POWELL, USA
 Secretary: Richard COOMBES, UK

Email: Colby.Harmon@noaa.gov
 Email: Julia.Powell@noaa.gov
 Email: Richard.Coombes@UKHO.gov.uk

5. DPSWG WORK PLAN

5.1 DPSWG Tasks

- A Prepare S-63 edition 1.1 to provide a more precise description for a compliant implementation of the data protection scheme.
- B Provide technical and operational support to Data Servers and OEMs developing or operating systems or services compliant with S-63.
- C Produce new edition of S-63 to complement S-101

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
A.4	Prepare information on migration to S-63 edition 1.1.1 to OEMs and Data Servers and monitor migration.	H	Ongoing	1.8.09	31.12.09	O	Richard Coombes / Jonathan Pritchard, UKHO	S-63 edition 1.1
B.1	Provide S-63 technical and operational support to Data Servers and OEMs	H	Ongoing	01.08.03		O	DPSWG members	S-63 edition 1.0/1.1
C.1	Engage stakeholders in drafting of new edition of S-63 to support S-101 development	M	Ongoing	1.9.09		O	Jonathan Pritchard, UKHO	S-63, S-101

5.2 DPSWG Meetings (IHO T3.1.6 refers)

Date	Location	Activity
24-25 Nov. 2003	IHB, Monaco	DPSWG 3

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

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

22-23 June 2004	IHB, Monaco	DPSWG 4
31 Aug - 1 Sept 2006	IHB, Monaco	DPSWG 5
28-30 May 2007	IHB, Monaco	DPSWG 6
31 Mar – 1 Apr 2009	IHB Monaco	DPSWG 7

Chairman: Jonathan PRITCHARD, UK Email: Jonathan.Pritchard@ukho.gov.uk
Vice Chairman: Vacant Email:
Secretary: Richard COOMBES, UK Email: Richard.Coombes@UKHO.gov.uk

6. CSPCWG WORK PLAN

- *Objectives, Tasks and Work Items are pursued in accordance with IHO Work Programme 2008-2012, Programme 3 (Techniques and Standards Coordination and Support):*
 - *Element 3.1 Meetings of Working Groups:*
 - *Task 3.1.3 Chart Standardization and Paper Chart Working Group*
 - *Element 3.3 Nautical Cartography. In particular:*
 - *Task 3.3.1 Nautical publications*
 - *Task 3.3.5 INT Chart Series*
- *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/electronic charting.*
- *As a Plan it will and should evolve; accordingly, contributions from WG members and others are welcomed at any time.*

6.1 CSPCWG Tasks

- A Revise, develop and maintain Publication S-4 'Chart Specifications of the IHO & Regulations of the IHO for INT Charts' (IHO T3.3.1 refers)
- B Revise, develop and maintain Publication S-11 'Catalogue of INT Charts' Part A maintained by CSPCWG (IHO T3.3.1 refers)
- D Development of new (and revised) symbology
- E Maintenance of S-4 supplementary publications INT 1, 2 & 3 (IHO T3.3.1 refers)
- F Revise, develop and maintain S-49 'Recommendations concerning Mariners' Routeing Guides'

- H Review selected Technical Resolutions from Publication M-3 'Technical and Administrative Resolutions' – Task completed

Task	Work item	Priority H-high M-medium L-low	Next Milestone	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person(s)	Affected Pubs/Standard	Remarks
A.4	Revise S-4 Part B Section 400	H	Revise and publish	2005	2009	O	Sec CSPCWG	S-4 / B-400	B-400 divided into sub-sections for manageability.
A.4.4.2	Sub-section B-480 to B-499	H	IHO CL55/2009 responses due 5/11/09	2008	2009	O	Sec CSPCWG	S-4 / B-400	CSPCWG consultation completed, IHO CL55/2009 to MS
A.5	Revise S-4 Part B Section 300	L	Completion of A.8			P	Sec CSPCWG	S-4 / B-300	Start after A.8 completed
A.6	Revise S-4 Part B Section 500	L	Completion of A.5			P	Sec CSPCWG	S-4 / B-500	Start after A.5
A.8	New specification for Chart Maintenance Section B-600	M	CSPCWG6	2006	2010	O	Sec CSPCWG	S-4 / B-600	Round 3 replies being reviewed by officers
B.2	Develop ToR / RoP for INT Chart Coordinators	H	Include in S-11 Part A	2009	2010	O	Chair CSPCWG	S-11 Part A	CHRIS Action 20/23. See HSSC1-06.5B
B.3	Develop guidelines for preparation & maintenance of small / medium scale ENC schemes.	M		2009	2010	P	Chair CSPCWG	S-11 / S-65?	CHRIS Action 20/24
D.14	Bridges (especially supports)	H	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4	WG Ltr 11/09 refers
D.15	Pipeline tunnel entrance	M	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4, INT 1	WG Ltr 11/09 refers
D.16	Wave energy devices	M	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4, INT 1	WG Ltr 11/09 refers
D.17	Unsurveyed areas	M	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4, INT 1	WG Ltr 11/09 refers
D.18	Platform with superstructure removed	M	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4, INT 1	WG Ltr 11/09 refers
D.19	Shellfish beds	M	IHO CL for MS	2008	2010	O	Sec CSPCWG	S-4, INT 1	WG Ltr 11/09 refers
E.1	Maintain official INT 1s	n/a	Next round of revisions to be considered after pub of B450-479:			P	FR: Y Le Franc ES: J Millan DE: S Spohn	INT 1	French version 2006 (plan 2010) Spanish version 2007 English version 2008
E.4	Symbols for vacant entries in INT 1	L	Review when revision of M-4 completed			P	Sec CSPCWG	INT 1, S-4 part B	
E.5	Small craft symbols	L				P	Sec CSPCWG	INT 1, S-4 part B	Agenda CSPCWG 6

E.8	Move part of INT1 K into L	L	Consider when next new editions of INT1 are prepared			P	INT1 subWG		CSPCWG4 Action 33. subWG consultation in progress.
F.1	Review S-49	M	IHO CL for MS	2008	2010	O	DE (J Schröder-Fürstenberg)	S-49	Circulated to WG for approval Ltr 12/09 refers

6.2 CSPCWG Meetings (IHO T3.1.3 refers)

Date	Location	Activity
03-05 Nov 04	IHB, Monaco	CSPCWG 1
19-21 Oct 05	IHB, Monaco	CSPCWG 2
22-24 Nov 06	IHB, Monaco	CSPCWG 3
13-15 Nov 07	IHB, Monaco	CSPCWG 4
18-21 Nov 08	Sydney, Australia	CSPCWG 5
1-3 Dec 09	IHB, Monaco	CSPCWG 6

Chairman: Peter JONES, UK

Vice Chairman: Jeff WOOTTON, Australia

Secretary: Andrew HEATH-COLEMAN, UK

Email: peter.jones@ukho.gov.uk

Email: jeff.wootton@defence.gov.au

Email: andrew.coleman@ukho.gov.uk

7. SNPWG WORK PLAN

7.1 SNPWG Tasks

- A. Decide on the Data Structure of NPs-Data intended for use in ECDIS (NP3)
- B. Define the content requirements of NP data intended for use in ECDIS (NP3)
- C. Test data
- D. Develop basic display rules for NP data intended for use in ECDIS (NP3)
- E. Draft guidance documents

- F. Revise technical resolutions as required
- G. Liaise with other HSSC WG's and other IHO and international bodies
- H. Address the remaining work in former TSMAD Work Item D *“Develop Marine Environment Protection Programme based on S-100”*

Task	Work Item	Priority H-high M-medium L-low	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person	Affected Pubs /Standard	Remarks
B.2	Model the data where required.	H	2004	Open	O	Chair/Sec SNPWG	S-100	To be included in NPUBS register
B.3	Review of objects and attributes	H	2004	2008	O	Chair/Sec SNPWG	S-100	
B.4	Propose amendments for Hydro register to TSMAD	H	2005	Open	O	Chair/Sec SNPWG	S-100	To be included in S-100 registry
B.6	Populate the NPUBS Register	H	2006	Open	O	Chair/Sec SNPWG	S-100	
C.1	Produce test data set	H	2009	2010	P	Chair/Sec SNPWG		
C.2	Set up a test bed ECDIS	M	2009	2010	P	Chair/Sec SNPWG		
D.1	Develop basic display rules for NP data intended for use in ECDIS (NP3)	M	2008	2010	O	Chair/Sec SNPWG	S-52	Close co-operation with DIPWG required
E.1	Data Capture Guidance	H	2008	Open	O	Chair/Sec SNPWG		Document for NPs similar to Use of the Object Catalog
E.2	Draft Product Specification Guidance and Sample	H	2008	2009	O	Chair/Sec SNPWG	S-10X	
G.1	Liaise with the DIPWG for the development of the display rules	H	2005	Open	O	Chair/Sec SNPWG		
G.2	Liaise with the TSMAD	H	2004	Open	O	Chair/Sec SNPWG		

Task	Work Item	Priority H-high M-medium L-low	Start Date	End Date	Status P-Planned O-Ongoing C-Completed	Contact Person	Affected Pubs /Standard	Remarks
G.3	Liaise with other groups	H	2004	Open	O	Chair/Sec SNPWG		Tides, MIO's, AML, ICE, Inland ECDIS
H.1	Address the remaining work in former TSMAD Work Item D <i>"Develop Marine Environment Protection Programme based on S-100"</i>	L	2011	2012	P	Chair/Sec SNPWG		

7.2 SNPWG Meetings (IHO T3.1.5 refers)

Date	Location	Activity
7-9 Jun 04	NOAA, Silver Spring, MD, USA	3 rd Meeting
1-3 Mar 05	IHB, Monaco	4 th Meeting
24-28 Oct 05	Copenhagen, Denmark	5 th Meeting
19-23 June 06	IHB, Monaco	6 th Meeting
12-16 Feb 07	Rostock, Germany	7 th Meeting
3-7 Sep 07	IHB, Monaco	8 th Meeting
21-25 Apr 08	Brest, France	9 th Meeting
23 -27 Feb 2009	NOAA Norfolk, VA, USA	10 th Meeting
7-11 Sep 2009	IHB, Monaco	11 th Meeting

Chairman: David ACLAND, UK
Vice-chairman: Jens SCHRÖDER-FÜRSTENBERG, Germany
Secretary: Pelle AAGAARD, Denmark

Email: David.Acland@UKHO.gov.uk
Email: jens.schroeder-fuerstenberg@bsh.de
Email: petar@kms.dk

8. DQWG WORK PLAN

8.1 DQWG Tasks

- A. Review ISO 19113, Geographic Information-Quality Principles, ISO 19114, Geographic Information-Quality Evaluation Procedures, and ISO 19115, Geographic Information - Metadata and propose relevant enhancements and amendments for incorporation in S-100.
- B. Monitor and further develop quality indicators for hydrographic data.
- C. Review and revise as needed existing S-57 quality indicators, including the education of both the mariner and the cartographer, and the development of documentation.
- D. Review and revise as needed the presentation of data quality, as provided in S-52 and its Presentation Library.
- E. Investigate ways of ensuring that ECDIS displays provide a clear warning or indication to the mariner on the quality of the underlying survey data, through appropriate use of the attribute CATZOC and/or improvement of the existing display capabilities.
- F. Propose new data quality topics and other applications for consideration by HSSC.

Task	Work item	Priority H-high M-medium L-low	Next Milestone	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s)	Affected Pubs/Standard	Remarks
A	Review ISO documentation	L		2010	-	P	DQWG	S-100	Not yet started. Will start once resource become available.
B.1	Review what quality indicators are routinely populated in ENCs by HOs	H	Questionnaire published to HOs	2009	2010	P	DQWG	-	Obtain base line of what attributes are captures and why others are not.
B.2	Review how CATZOCs are populated by HOs	H	Questionnaire published to HOs	2009	2010	P	DQWG	-	Obtain base line of what criteria for historic and current surveys result in what CATZOC allocation.

D.1	Identify mariners perception of quality and quality indicators	M		2010	2010	P	DQWG	-	Questionnaire to understand mariners perception of data quality and how they react to it
E.1	Investigate ways to portray data quality to the mariner	M	Requires B.1, B.2 and D.1 to be complete	2010	2011	P	DQWG	-	Possible subject for MSc thesis.
E.2	Demonstrate methods to mariners	M	Follows from E.1	2011	2012	P	DQWG	S-57, S-100	Build possible methods into ENC and ECDIS to demonstrate effectiveness.
F.1	Investigate areas of quality concern (other than survey / bathymetry)	L		2010	-	P	DQWG	-	Investigate the merit of supplying quality attributes to other elements of ENC and other publications e.g. Sailing Directions etc.

8.2 DQWG Meetings

Date	Location	Activity
23 Sep 08	Bath, UK	Kick-off meeting
20 Oct 08	Portsmouth, NH, USA	1st Meeting
10- 11 May 09	Norfolk, VA, USA	2nd Meeting

Chairman: Chris HOWLETT Email: Chris.Howlett@ukho.gov.uk
Vice-chairman: Vacant Email:
Secretary: Vacant Email:

9. MSDIWG WORK PLAN

9.1 MSDIWG Tasks

- A Prepare IHO Road Map to support MS' capability development in MSDI
- B Monitor national and international marine SDI activities and liaise to increase visibility
- C Prepare detailed work plan based on new Terms of Reference

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s)	Related Pubs/Standard
A.1	Maintain C-17 and its associated capacity-building documents	M	Review for updates	Feb 2010	Aug 2010	O	Chair/Vice Chair; MSDIWG	C-17, Spatial Data Infrastructures "The Marine Dimension" Guidance for Hydrographic Offices and associated supporting documents
A.2	Review of the MSDIWG page on the IHO Web site and recommend improvements/ revisions, if needed, to support capacity building and use of IHO standards in SDI activities.	H	Review current presentation	Feb 2010	Apr 2010	P	Chair/Vice Chair; MSDIWG	C-17, Spatial Data Infrastructures "The Marine Dimension" Guidance for Hydrographic Offices and associated supporting documents
		H	Prepare recommendations	May 2010	July 2010	P		
B.1	Monitor national and international SDI activities, including the EU INSPIRE Directive, with a focus on the marine data and determine the appropriate frequency of monitoring	M	Investigate methods/ frequency to monitor and collate recommendations	May 2010	Aug 2010	P	Chair/Vice Chair; MSDIWG	
			Initiate monitoring	Aug 2010	Oct 2010	P		
B.2	Liaise to discuss regional and national MSDI efforts, education, and outreach	M	Determine relevant technical bodies/IHO working groups	Jun 2010	Aug 2010	P	Chair/Vice Chair; MSDIWG	
B.3	Liaise with TSMAD about S-100 use in support of SDI activities including INSPIRE	M	Obtain feedback from TSMAD on MSDIWG group-established topics	Jun 2010	Aug 2010	P	Chair/Vice Chair; MSDIWG	

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s)	Related Pubs/Standard
C.1	Discuss all procedures in the new terms of reference and identify actions for the working group resulting in a revised and more detailed work plan	H	Prepare detailed work plan	Mar 2010	Jun 2010	P	Chair/Vice Chair; MSDIWG	

9.2 MSDIWG Meetings

Date	Location	Activity
4-5 Feb 08	IHB, Monaco	1 st Meeting
10-11 Sep 08	IHB, Monaco	2 nd Meeting
2-3 Apr 09	IHB, Monaco	3 rd meeting

Chairman: Maureen KENNY, USA Email: Maureen.Kenny@noaa.gov
Vice-chairman: Vacant Email:
Secretary: Vacant Email:

10. TWLWG WORK PLAN

10.1 TWLWG Tasks

- A Maintain Standard Tidal Constituent List (IHO Work Programme 3.2.4 refers)
- B Prepare a Standard for Digital Tide Tables (IHOTC Report to the XVIIth IHC as adopted)
- C Liaise with TSMAD on tidal matters relevant to the Dynamic Application of Tides in ECDIS and develop a Standard of the transmission of real-time tidal data (Action HSSC1/xx)
- D Monitor and assist in the preparation of English translation of the Tidal Manual prepared by the Institut Océanographique and SHOM (IHO funded the translation from French to English)

- E Review the various definitions of MSL and their relevance to Hydrographic Offices and review the IHO tidal resolutions to ensure that they are compatible with the requirements of non tidal areas such as the Baltic Sea.
- F Prepare and maintain an inventory of tide gauges used by Member States and to publish it on the IHO/TWLWG web site.
- G Prepare structure and contents for a short course (maximum 5 days) on “Tides for hydrography” for the Capacity Building Sub Committee

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
A.1	Maintain Standard Tidal Constituent List	H		Continuous		O	Chris Jones* Lucia Pineau	
B.2	Prepare a Standard for Digital Tide Tables	H	Prepare draft Standard	2009	2011	P	Lucia Pineau* Stephen Gill Chris Jones Zarina Jayaswal	
C.1	Liaise with TSMAD on tidal matters relevant to the Dynamic Application of Tides in ECDIS	H		2009	2009	P	Steve Gill* Zarina Jayaswal Chris Jones Phil MacAulay Dan Pillic Steve Shipman	
C.2	Develop a Standard of the transmission of real-time tidal data	H		2009	2010			
D.1	Provide advice to the translator preparing the English text of the Tidal Manual prepared by the Institut Océanographique and SHOM	H	Completion of translation into English.	2003	2009	O	Steve Shipman*	
D.2	Proof read the English translation of the Tidal Manual prepared by the Institut Océanographique and SHOM	H	Approval of the English text.	2009	2010	P	Steve Shipman*	

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
E.1	Review the various definitions of MSL and their relevance to Hydrographic Offices and review the IHO tidal resolutions to ensure that they are compatible with the requirements of non tidal areas such as the Baltic Sea.	H		2009	2010	P	Jukka Varonen* Tor Torresen Lucia Pineau Steve Gill Steve Shipman	
F.1	Prepare and maintain an inventory of tide gauges used by Member States and to publish it on the IHO/TWLWG web site.	H		2009	2010	P	Steve Shipman* Steve Gill	
G.1	Prepare structure and contents for a short course (maximum 5 days) on "Tides for hydrography"	H	Delivery of course structure to CBSC.	2009	2009	O	Steve Gill* Steve Shipman	

10.2 TWLWG Meetings (IHO Task 3.1.11 refers)

Date	Location	Activity
30 Mar – 1 Apr 09	Niteroi Brazil	1 st Meeting
Apr 2010 (dates tbc)	Stavanger, Norway	2 nd Meeting
April 2011	tbd	3 rd Meeting

Chair: Stephen GILL, USA

Vice-Chair: Lucia PINEAU-GUILLOU, France

Secretary: Steve SHIPMAN, IHB

Email: Stephen.Gill@noaa.gov

Email: lucia.pineau-guillou@shom.fr

Email: sshipman@ihb.mc

11. HDWG WORK PLAN

11.1 HDWG Tasks

- A Review and update the definitions in the IHO Dictionary in French English and Spanish. (HDWG ToR 1)
- B Liaise with other IHO bodies preparing publications containing glossaries. (HDWG ToR 3c)
- C Liaise with other organizations developing dictionaries and/or glossaries. (HDWG ToR 3d)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
A1	Consider proposals from Greece for inclusion of 3 new terms related to the Coast.	M	a. Terms 1 - 3	2010	2011		All	
A2	Consider UKHO proposal regarding "irregular" and "unreliable" with regard to the working of a navigational light. (See also B-5)	M	a. Terms 1 - 2	2010	2011		All	
B1	Review terms from former S-52 ECDIS Glossary which have not been included in the S-32 ECDIS Appendix for possible inclusion in S-32 (29 terms)	H	a. Terms 1 – 9 b. Terms 10 – 19 c. Terms 20 - 29	2010	2011		All	S-32 Appendix 1 (Formerly S-52 Appendix 3)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
B2	Review proposals from CSPCWG	H	a. Ships' Routeing b. "Soundings" and "Depths". c. "Inadequately surveyed areas" and "Unsurveyed Areas" d. Seabed / Sea Bottom / Sea Floor? e. ESSA; PSSA and wind turbine. f. "Phase" of a navigational light. g. Definition of "International Shipping"	2009	2010		All	IMO Ships' Routeing Guide
B3	Review proposals from SCUFN for a harmonization of terms in B-6 (Undersea Feature Terminology) and S-32 (23 terms for consideration by HDWG)	H	a. Terms 1 – 11 b. Terms 2 - 23	2009	2010		All	IHO Publication B-6 "Standardization of Undersea Feature Names", 4 th Ed, Nov 08
B4	Review of proposals from PRNW (16 terms)	H	a. Terms 1 - 16	2010	2011		All	
B5	Review of proposal from TSMAD regarding alignment of definitions in S-57 Object Catalogue. 58 proposals.	H	a. Terms 1 – 9 b. Terms 10 -19 c. Terms 20 – 29 d. Terms 30 – 39 e. Terms 40 - 49 f. Terms 50 - 58	2009	2010		All	S-57 Appendix A Object Catalogue

11.2 HDWG Meetings (IHO WP Task 3.1.8 refers)

Date **Location** **Activity**

Only if necessary

Chair: Jerry MILLS, USA
 Vice-Chair: Vacant
 Secretary: Steve SHIPMAN, IHB

Email: Jerry.Mills@noaa.gov
 Email:
 Email: sshipman@ihb.mc

12. EUWG WORK PLAN

12.1 EUWG Tasks

- A Review and revise Appendix 1 to S-52 for incorporation in S-65
- B Review the status of RNW on ECDIS for recommendations
- C Submit a report, any recommendations, and a final draft of the revised text to the HSSC in 2010 for its consideration

Task	Work item	Priority *	Milestones	Start Date	End Date	Status **	Contact Person(s)	Affected Pubs/Standard
A.1	Define a detailed work plan	H	Ongoing	01/12/09	15/01/10	O	Yves Le Franc	
A,2	Review and revise Appendix 1 to S-52 for incorporation in S-65							S-52 - S-65
B.1	Define a detailed work plan	H		01/01/10	31/01/10	P	Yves Le Franc	
B.2	Review the status of RNW on ECDIS for recommendations							S-52
C,1	Prepare report and recommendations			15/06/10	31/08/10			

12.2 EUWG Meetings

* H = High, M = Medium, L = Low
 * P = Planned, O = Ongoing, C = Completed

None. The WG works by correspondence unless a meeting is considered necessary to complete the assigned tasks

Chairman: Yves Le Franc, France

Email: FR: yves.le.franc@shom.fr

Vice Chairman: Richard Coombes, UK

Email: Richard.Coombes@UKHO.gov.uk

Secretary: Vacant

13. ABLOS Work Plan

13.1 ABLOS Tasks

- A Organise the 6th ABLOS Conference in 2010 (IHO Task 3.6.1)
- B Maintain IHO Publication C-51 (formerly S-51) "Technical Aspects of the Law of the Sea (TALOS) Manual" (IHO Task 3.6.2)
- C Prepare a standard training program on the hydrographic aspects of maritime delimitation. (IHO Task 3.6.3)
- D Organise the 7th ABLOS Conference in 2012 (IHO Task 3.6.1)
- E Provide advice and guidance on the technical aspect of the Law of the Sea to relevant organizations, bodies and Member States. (IHO Task 3.1.16)

Task	Work item	Priority H-high M-medium L-low	Milestones	Start Date	End Date	Status P-planned O-ongoing C-completed	Contact Person(s) * indicates leader	Related Pubs/Standard
A1	Organise 6 th ABLOS Conference	H		2009	2010	O	Chris Rizos, Ron Macnab, Chris Carleton, John Brown, Sunil Bisnath, Steve Shipman	N/A
B1	Review C-51 4 th Edition for any necessary updating.	H		2009	2011	P	Chris Rizos, Shin Tani, Ron Macnab, Graeme Blick, Sunil Bisnath and Steve Shipman	IHO Publication C-51

C1	Prepare standard training programme for the CBSC	H		2009	2010	O	Chris Carleton* John Brown Muhammad Bashir, Shin Tani, Ron Macnab, Steve Shipman	
D1	Organise the 7 th ABLOS Conference	H		2011	2012	P	Decision at ABLOS 18	
E1	Provide advice and guidance on the technical aspect of the Law of the Sea	H		Continuous		O	All members of ABLOS through the Chairman	

13.2 ABLOS Meetings (IHO Tasks 3.1.16 and 3.6.1 refer)

Date	Location	Activity
4-5 August 2009	Bali, Indonesia	16 th Meeting
October 2010	IHB, Monaco	17 th Business Meeting and 6 th ABLOS Conference
2011	Tbd (Possibly Chile)	18 th Business Meeting
2012	IHB, Monaco	19 th Business Meeting and 7 th ABLOS Conference

Chair: Chris RIZOS, Australia
Vice-Chair: Chris CARLETON, UK
Secretary: Steve SHIPMAN, UK

Email: c.rizos@unsw.edu.au
Email: chris.carleton@ukho.gov.uk
Email: sshipman@ihb.mc