

**18<sup>th</sup> CHRIS MEETING**  
**Cairns, Australia, 25-29 September 2006**

**CHRIS INPUT TO IHO WP 2008-2012**

<b>3.</b> <b>Technical Matters and Standards</b>				
<b>3.1</b> <b>Meetings of Committees and Working Groups</b>	<b>3.2</b> <b>Hydrographic Surveying</b>	<b>3.3 (old 3.1)</b> <b>Nautical Cartography</b>	<b>3.4</b> <b>Marine Safety Information</b>	<b>3.5 (old 3.4)</b> <b>Data for Geomatics Applications</b>
<b>3.1.1</b> Convene formal meetings of technical bodies	<b>3.2.1</b> Develop and maintain IHO technical specifications and guidelines that govern hydrographic surveying <i>This Element is currently outside the remit of CHRIS</i>	<b>3.3.1</b> Develop and maintain IHO technical specifications and standards that guide the producers of nautical charts and associated nautical publications	<i>This Element is currently outside the remit of CHRIS</i>	<b>3.5.1</b> Develop processes under which Hydrographic Data and Exchange product specifications may be created under S-100
		<b>3.3.2</b> Digital Data Protection		<b>3.5.2</b> Maritime Spatial Data Infrastructures
		<b>3.3.3</b> Maintain liaison and cooperation with other organizations		

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

#### 3.1 Meetings of Committees and Working Groups

Objective:

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

Name of the Task:

Convene formal meetings of technical bodies

Short description of the activity (what and for what):

Convene and facilitate meetings of the CHRIS, WGs and subordinate bodies to coordinate and execute the detail of approved IHO work program items and to consider issues and provide guidance and advice to relevant organisations, bodies and MS as follows:

CHRIS	Committee on Hydrographic Requirements for Information Systems	annually
TSMAD	Transfer Standards and Applications Development WG	6-monthly
	TSMAD Sub WGs	as required
CSPCWG	Chart Standardization and Paper Chart WG	annually
	CSPCWG Sub WGs	as required
CSMWG	Colours and Symbols Maintenance WG	annually
SNPWG	Standardization of Nautical Publications WG	as required
	SNPWG Sub WGs	as required
DPSWG	Data Protection Standards WG	as required
HGMIO	Harmonization Group on Marine Information objects	as required

Brief description of the associated deliverables (products, effects, results, etc):

Technical policy guidance

Subordinate work programs

Proposals for MS consideration and approval

IHO standards, specifications and guidelines

Timing (indicate in which year(s) the activity will take place):

Ongoing

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Number of MS represented at meetings

Number of proposals presented for consideration at meetings

Number of WP items completed on time

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

CHRIS:	2 IHB x 7 days x 250€	= 3,500	
	2 IHB x 1 flight x 3000€	= 6,000	
TSMAD	1 IHB x 7 days x 250€ x 2 times	= 3,500	
	1 IHB x 1 flight x 3000€ x 2 times	= 6,000	
TSMAD subWGs	1 IHB x 7 days x 250€ x 2 times	= 3,500	
	1 IHB x 1 flight x 3000€ x 2 times	= 6,000	
CSPCWG	1 IHB x 5 days x 250€	= 1,250	
	1 IHB x 1 flight x 3000€	= 3,000	
CSMWG	1 IHB x 5 days x 250€	= 1,250	
	1 IHB x 1 flight x 3000€	= 3,000	
SNPWG	1 IHB x 5 days x 250€	= 1,250	
	1 IHB x 1 flight x 3000€	= 3,000	
DPSWG	1 IHB x 5 days x 250€	= 1,250	
	1 IHB x 1 flight x 3000€	= 3,000	
HGMIO	1 IHB x 5 days x 250€	= 1,250	
	1 IHB x 1 flight x 3000€	= 3,000	
<b>TOTAL IHB travel and associated salary costs per year</b>		<b>= 40,250 €</b>	
IHB clerical assistance and support:			
	To be estimated by IHB		
<b>TOTAL</b>		<b>= ??? €</b>	

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

Assuming:

20 participants per meeting

average travel/salary component per participant of 5000€

9 meetings per year

**TOTAL: 900,000€**

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.2 Hydrographic Surveying

Objective:

Improve the quality of hydrographic data gathering through the development of specifications and standards for the execution of hydrographic surveys and the provision of support to achieve best practice.

Name of the Task:

Develop and maintain IHO technical specifications and guidelines that govern hydrographic surveying

*This Element is currently outside the remit of CHRIS.  
In future it will incorporate S-44, et cetera*

Short description of the activity (what and for what):

Brief description of the associated deliverables (products, effects, results, etc):

Timing (indicate in which year(s) the activity will take place):

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP 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.

Name of the Task:

Develop and maintain IHO technical specifications and standards that guide the producers of nautical charts and associated nautical publications

Short description of the activity (what and for what):

Revise, develop, and maintain the following publications:

M-4 Chart Specifications of the IHO and Regulations for International (INT) Charts  
M-11 Catalogue of International (INT) Charts and Guidance for Regional Coordinators of INT Chart Schemes  
S-52 Specifications for Chart Content and Display Aspects of ECDIS  
S-57 (including Appendix B.1 – ENC Product Specification) - IHO Transfer Standard for Digital Hydrographic Data  
S-100 The IHO Geospatial Standard for Hydrographic Data  
S-101 (new ENC Product Specification)  
S-10X (Product Specification for NP3 (digital Sailing Directions)  
Digital Sailing Directions Register  
Coordinate production and publication of INT1, INT2 and INT3

Brief description of the associated deliverables (products, effects, results, etc):

Authoritative standards, specifications and associated guidelines and documentation.

Timing (indicate in which year(s) the activity will take place):

M-4 ongoing (complete and publish revision of Part B by 2009)  
M-11 - ongoing (includes maintenance of Catalogue)  
S-52 ongoing  
S-57 (including Appendix B.1 – ENC Product Specification) - ongoing  
Presentation Standards for Digital Nautical Publications in ECDIS - 2008  
S-100 First edition published by 2008  
S-101 Published and implemented not earlier than 2012  
Digital Sailing Directions Register - 2008

S-10X NP3 Product Specification - First edition published by 2008  
Coordinate production and publication of INT1, INT2 and INT3 - ongoing

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Adherence to timetable

Number of active participating MS

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

2 x IHB PAs (*how long? how much?*)

IHB clerical assistance and support:

*To be estimated by IHB*

Funding for contract support for maintenance of S52 Pres Lib

12,000€

**TOTAL: ??? €**

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

For work undertaken other than formal meetings, and assuming:

10 active participants per task (~10)

attendance at related non-IHO meetings: 8 attendees @ 5000€ each person

direct contractor support: 55,000€

each participant devotes two working weeks per year to these IHO work activities other than IHO meetings

participants' average salary is 700€ pw

**TOTAL: 235,000€**

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.3 Nautical Cartography

Objective:

Facilitate worldwide quality nautical charting coverage through the development of specifications and standards for the production, distribution and updating of cartographic products and supporting publications.

Name of the Task:

Digital Data Protection

Short description of the activity (what and for what):

- Provide support to users on the implementation and operation of the IHO data protection scheme S-63
- Develop and maintain the IHO standard for data protection S-63 with support for the future ENC product specification S-101 and other relevant product specifications based on S-100
- Provide the IHB with the necessary support to operate the scheme as scheme administrator

Brief description of the associated deliverables (products, effects, results, etc):

- Authoritative specifications and associated test data and documentation
- Maintenance documents for the IHO data protection scheme
- Registry of S-63 accredited data servers and OEMs. (Registry located at IHB)

Timing (indicate in which year(s) the activity will take place):

- Maintenance documentation for S-63 edition 1.1 when required
- S-63 edition 2 published in association with S-101 (2012)

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

- Number of data servers and OEMs using the IHO data protection scheme

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

2 IHB x 10 days x 250€ = 25,000€ (scheme administration)

**TOTAL: ??? €**

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

For work undertaken other than formal meetings, and assuming:

5 active participants

each participant devotes one working week per year to this IHO work activity other than IHO meetings  
participants' average salary is 700€ pw  
**TOTAL: 3,500€**



## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.3 Nautical Cartography

Objective:

Facilitate worldwide quality nautical charting coverage through the development of specifications and standards for the production, distribution and updating of cartographic products and supporting publications.

Name of the Task:

Maintain liaison and cooperation with other organizations

Short description of the activity (what and for what):

Develop and maintain contacts with relevant organizations to harmonize standards, avoid potential conflicts, anticipate developments and to maximise the quality and availability of adequate nautical products and services, by inviting participation in appropriate IHO forums, and through IHO participation in government and non-government activities such as IEC/TC80, ISO TC211, DGIWG, Global Spatial Data Infrastructure, ICA Commission on Spatial Data Standards.

Brief description of the associated deliverables (products, effects, results, etc):

Standards, specifications and guidelines that are in harmony with other stakeholders' requirements

Timing (indicate in which year(s) the activity will take place):

Continuous

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Rate of participation of NGIO's at IHO meetings and forums

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

1 x IHB Director (*how long? how much?*)

2 x IHB PAs (*how long? how much?*)

IHB clerical assistance and support:

*To be estimated by IHB*

**TOTAL: ??? €**

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

Assuming MS representatives attend relevant meetings and engage in related IHO activity; as follows:

150 participants per year

each participant devotes one working day per year to this activity

participants' average salary is 700€ pw

**TOTAL: 15,000€**

**IHO WORK PROGRAM - TASK IDENTIFICATION FORM**

*TO REACH IHB 01 AUGUST OCTOBER 2006*

**Committee on Hydrographic Requirements for Information Systems  
(CHRIS)**

WP Element:

3.4 Marine Safety Information

Objective:

Facilitate the efficient provision of maritime safety information to mariners through coordination and the establishment of relevant standards between agencies.

Name of the Task:

*This Element is outside the remit of CHRIS*

Short description of the activity (what and for what):

Brief description of the associated deliverables (products, effects, results, etc):

Timing (indicate in which year(s) the activity will take place):

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.5 Data for Geomatics Applications

Objective:

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

Name of the Task:

Develop processes under which Hydrographic Data and Exchange product specifications may be created under S-100

Short description of the activity (what and for what):

Provide guidance documentation as part of the development of S-100

Brief description of the associated deliverables (products, effects, results, etc):

Authoritative specifications and associated guidelines and documentation.

Timing (indicate in which year(s) the activity will take place):

S-100 First edition published by 2008

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Rate of development of new S-100 profiles

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

2 x IHB PAs (part time)

IHB administrative support

**TOTAL: ??? €**

*To be estimated by IHB*

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

The majority of this work will be undertaken at programmed CHRIS and subordinate WG meetings. Resources are therefore accounted for elsewhere in the WP

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.5 Data for Geomatics Applications

Objective:

Provide guidance and where appropriate develop standards to optimize and extend the use of hydrographic data for purposes other than navigation.

Name of the Task:

Maritime Spatial Data Infrastructures

Short description of the activity (what and for what):

Monitor global geomatics developments, especially those connected with coastal zone data management and the development of national, regional and global spatial data infrastructures and provide guidance to MS as appropriate.

Brief description of the associated deliverables (products, effects, results, etc):

- Guidance and proposals for IHO MS consideration.
- Input and influence to global infrastructure development

Timing (indicate in which year(s) the activity will take place):

No specific deliverables identified at present (2006)

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Not Applicable at present (2006)

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

Not Applicable at present (2006)

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):

Not Applicable at present (2006)

## IHO WORK PROGRAM - TASK IDENTIFICATION FORM

TO REACH IHB ~~01 AUGUST~~ OCTOBER 2006

### Committee on Hydrographic Requirements for Information Systems (CHRIS)

WP Element:

3.6 Technical aspects of the Law of the Sea

Objective:

Provide expert advice to relevant international organizations and Member States on the Hydrographic aspects of the UN Convention on the Law of the Sea

Name of the Task:

*This is outside the remit of CHRIS*

Short description of the activity (what and for what):

Brief description of the associated deliverables (products, effects, results, etc):

Timing (indicate in which year(s) the activity will take place):

Indicators that could be used to assess effectiveness (parameter(s) that could be used to measure the level of success):

Estimated resources from regular IHB budget (it will be mainly determined by IHB based on historical records and input received):

Estimated global resources from direct MS contribution (the total general cost of the activity for MS as a whole):