

## IHO WORK PROGRAMME - Year 2014

based on IHO Five-Year Work Programme 2013-2017 (see CONF.18/REP/01)  
and the approved IHO 2014 budget (see CL 74/2013)

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
<b>PROGRAMME 1 – CORPORATE AFFAIRS</b>					
<b>1.1</b>	<b>Co-operation with International Organizations and participation in relevant meetings</b>			<b>1 &amp; 3</b>	
1.1.1	Antarctic Treaty Consultative Meeting (ATCM)	Pres	ADCS		
1.1.2	Comité International Radio Maritime (CIRM)	DTech	ADSO		
1.1.3	Council of Managers of National Antarctic Programs (COMNAP)	Pres	ADCS		
1.1.4	European Union Initiatives, such as:	DTech	ADCC		
1.1.4.1	INSPIRE				
1.1.5	International Federation of Surveyors (FIG)	DCoord	ADCC		
1.1.6	International Federation of Hydrographic Societies (IFHS)	Pres	ADSO		
1.1.6.1	HYDRO14				
1.1.7	International Association of Antarctic Tour Operators (IAATO)	Pres	ADCS		
1.1.8	IALA, such as:	DTech	ADSO		
1.1.8.1	e-NAV Committee				
1.1.8.2	Annual secretariat liaison meeting	Pres			
1.1.8.3	18 <sup>th</sup> IALA Conference	Pres			
1.1.9	International Association of Ports and Harbours (IAPH)	Pres	ADDT		
1.1.10	International Cartographic Association (ICA) (such as ICA Commission on Geoinformation Infrastructures and Standards)	DTech	ADCS		
1.1.11	International Electrotechnical Commission (IEC) (such as IEC Technical Committee 80)	DTech	ADDT		
1.1.12	International Maritime Organization (IMO), including:				
1.1.12.1	Assembly	Pres	ADSO		
1.1.12.2	Council	Pres	ADSO		
1.1.12.3	MSC	Pres	ADSO		
1.1.12.4	NCSR	DTech	ADSO		
1.1.12.5	TCC	DCoord	ADCC		
1.1.12.6	SDC	DTech	ADSO		
1.1.12.7	HTW	DTech	ADSO		
1.1.13	International Maritime Pilots' Association (IMPA)	Pres	ADSO		
1.1.14	Intergovernmental Oceanographic Commission (IOC) of UNESCO, including:	DCoord	ADSO		
1.1.14.1	Assembly				
1.1.14.2	Council				
1.1.14.3	Specialized WGs				
1.1.15	International Organization for Standardization (ISO), including:	DTech	ADDT		
1.1.15.1	ISO Technical Committee 211				
1.1.16	Joint Board of GIS (JB-GIS)	Pres	ADCS		
1.1.17	NATO geospatial bodies, such as:	DTech	ADDT		
1.1.17.1	DGIWG				
1.1.18	UN, including:	Pres	ADCS		
1.1.18.1	UNICPOLOS				

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1.1.18.2	UN-GGIM				
1.1.19	World Meteorological Organization (WMO)	Pres	ADSO		
1.1.20	Other organizations when their agendas have relevance to the programme of the IHO, such as : Group on Earth Observation (GEO); Pan-American Institute of Geography and History (PAIGH); Port Management Association West and Central Africa (PMAWCA) & Maritime Organizations of West and Central Africa (MOCWA); the Scientific Committee on Antarctic Research (SCAR); Global Partnership for Oceans (GPO)	Pres or Director and AD responsible for the relevant RHC when appropriate			
<b>1.2</b>	<b>Information Management</b>			<b>1 &amp; 4</b>	
1.2.1	Maintain and extend the IHO website using commercial contract support	Pres	ADDT		
1.2.2	Develop IHO GIS and web server and web mapping services in support of RHCs, ENC availability, INT chart coordination, C-55 and other related activities, including using commercial contract support	Pres	ADDT		
1.2.3	Develop and maintain IHB desk-top and in-house publishing facilities	Pres	ADSO		
1.2.4	Compile and publish the following documents that are not allocated to a specific IHO body, including:				
1.2.4.1	P-5 – IHO Yearbook	Pres	ADCC		
1.2.4.2	P-7 – IHO Annual Report	DCoord	ADCC		
1.2.4.3	M-3 – IHO Resolutions	Pres	ADCC		
1.2.5	Maintain and extend IHB Admin IT infrastructure	Pres	ADDT		
1.2.6	Communication between the IHB and Member States through Circular Letters	Pres	ADSO		
1.2.7	IHB Technical Library – incorporate new material	Pres	ADSO		
<b>1.3</b>	<b>Public Relations</b>			<b>3</b>	
1.3.1	Maintain relationships with the Government of Monaco and the diplomatic corps accredited in Monaco	Pres	MFA		
1.3.2	Compile and publish P-1 – <i>International Hydrographic Review</i> in collaboration with IHR editor	DCoord	ADCC		
1.3.3	World Hydrography Day, including:	DCoord	ADCC		
1.3.3.1	Preparation of support materiel				
1.3.3.2	Celebratory events in Monaco				
1.3.3.3	Celebratory events in Member States				
1.3.4	General Public Relation support. Representation expenses	Pres	ADCC		
<b>1.4</b>	<b>Work Programme &amp; Budget, Strategic Plan and Performance Monitoring</b>			<b>1</b>	
1.4.1	Implement and administer processes for programme management, performance monitoring and risk assessment, including the acquisition and operation of suitable business software tools	Pres	ADCC		
1.4.2	Execute the IHO Work Programme and Budget approved by the XVIII <sup>th</sup> IHC, monitoring its progress and adopting the necessary adjustment according to the circumstances	Pres	MFA		
1.4.3	Conduct biennial IHO stakeholders' forums	DTech	as required according to topics		
<b>1.5</b>	<b>IHB Management</b>			<b>1</b>	

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
1.5.1	Maintain, update and develop necessary procedures to facilitate and improve effectiveness of the general and permanent Finance and Administrative work.	Pres	MFA		
1.5.2	Provide in-house translation service English/French and French/English in support of the IHO WP. Include Spanish translations as much as possible in accordance with relevant IHO Resolutions	DCoord	ADSO		
1.5.3	Engage contract support to supplement maintenance and development of technical standards beyond the resources or competence of the IHB or the IHO WGs, including:	Pres	MFA		
1.5.3.1	Translation	DCoord	ADSO		
1.5.3.2	Technical editing	DTech	ADSO		
1.5.3.3	Cataloguing the IHO working document archive	Pres	MFA		
1.5.4	Monitor and maintain the Staff Regulations and the Job Descriptions of the IHB Staff in step with the evolution of the IHO work programme and IHO requirements.	Pres	MFA		
1.5.5	Maintain the IHB premises as required as the occupant	Pres	MFA		
1.5.6	Maintain furniture, carry out renovations or modifications as requirements arise	Pres	ADDT		
<b>1.6</b>	<b>International Hydrographic Conference</b>			<b>1 &amp; 4</b>	
1.6.1	Organize the 5 <sup>th</sup> Extraordinary International Hydrographic Conference in 2014	DCoord	ADCC		
<b>PROGRAMME 2 - SERVICES AND STANDARDS</b>					
<b>2.1</b>	<b>Technical Programme Coordination</b>			<b>2</b>	
2.1.1	Conduct annual meeting of HSSC	DTech	ADCS		
2.1.1.1	Chair briefing				
2.1.2	Provide technical advice and guidance on IHO technical standards, specification and publications		ADDT		
<b>2.2</b>	<b>Hydrographic Data Transfer Standards</b>			<b>3 &amp; 4</b>	
2.2.1	Conduct meetings of relevant HSSC WGs dealing with hydrographic data transfer standards	DTech	ADDT		
2.2.2	Maintain and extend the relevant IHO standards, specifications and publications, using contract support assistance as appropriate, including:	DTech	ADDT		
2.2.2.1	S-57 IHO Transfer Standard for Digital Hydrographic Data		ADDT		
2.2.2.2	S-100 IHO Universal Hydrographic Data Model		ADDT		
2.2.2.3	S-101 ENC Product Specification		ADDT		
2.2.2.4	S-102 Bathymetric Surface Product Specification		ADDT		
2.2.2.5	S-58 Recommended ENC Validation Checks		ADDT		
2.2.2.6	S-65 ENC Production Guidance		ADDT		
2.2.2.7	S-64 IHO Test Data Sets for ECDIS		ADCS		
2.2.2.8	S-61 Product Specification for Raster Navigational Charts		ADDT		
2.2.2.9	S-99 Operational Procedures for the Organization and Management of the S-100 Geospatial Information Registry		ADDT		
2.2.2.10	S-66 Facts about Electronic Charts and Carriage Requirements		ADCS		

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2.2.2.11	Participate in RENC Joint Technical Experts WG (JTEWG)		ADDT		
2.2.3	Develop and maintain as-yet undefined S-100-based Product Specifications, including:	DTech	ADDT	-	-
2.2.3.1	Product Specification for surface currents		ADSO		
2.2.4	Maintain and extend S-100 registry	DTech	ADDT		
2.2.5	Provide outreach and technical assistance regarding transfer standards	DTech	ADDT		
<b>2.3</b>	<b>Nautical Cartography</b>			<b>2</b>	
2.3.1	Conduct meetings of relevant HSSC WGs dealing with nautical cartography:	DTech			
2.3.1.1	Chart Standardization and Paper Chart Working Group		ADCS		
2.3.1.2	Digital Information Portrayal Working Group		ADCC		
2.3.2	Maintain and extend the relevant IHO standards, specifications and publications, using contract support assistance as appropriate, including:	DTech			
2.3.2.1	S-4 Chart Specifications of the IHO and Regulations for International (INT) Charts		ADCS		
2.3.2.2	INT 1 - Symbols, Abbreviations and Terms used on Charts		ADCS		
2.3.2.3	INT 2 - Borders, Graduations, Grids and Linear Scales		ADCS		
2.3.2.4	INT 3 - Use of Symbols and Abbreviations		ADCS		
2.3.2.5	S-11 Part A - Guidance for the Preparation and Maintenance of INT Chart schemes		ADCS		
2.3.2.6	S-11 Part B - Catalogue of INT Charts		ADCS		
2.3.2.7	S-49 Standardization of Mariners' Routeing Guides		ADCS		
2.3.2.8	Digital data updating related elements of Appendix 1 to S-52 - Guidance on Updating the Electronic Navigational Chart		ADCS		
2.3.2.9	S-52 and its accompanying Presentation Library - Specifications for Chart Content and Display Aspects of ECDIS		ADCC		
2.3.2.10	Portrayal related elements of S-101 - ENC Product Specification and other S-100-base	ADCC			
<b>2.4</b>	<b>Digital Data Protection and Authentication</b>			<b>2</b>	
2.4.1	Conduct meetings of relevant HSSC WGs dealing with Data Protection and Authentication	DTech	ADDT		
2.4.2	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech			
2.4.2.1	S-63 IHO Data Protection Scheme		ADDT		
2.4.2.2	Data protection and authentication related elements of S-100 - IHO Universal Hydrographic Data Model		ADDT		
2.4.2.4	S-101 - ENC Product Specification		ADDT		
<b>2.5</b>	<b>Data Quality</b>			<b>2</b>	
2.5.1	Conduct meetings of relevant HSSC WG dealing with data quality	DTech	ADCS		
2.5.2	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech			
2.5.2.1	Data quality related elements of S-57 - IHO Transfer Standard for Digital Hydrographic Data		ADDT		

<b>Element / Task</b>	<b>Title</b>	<b>Principal Director</b>	<b>Principal Manager</b>	<b>Strategic Direction</b>	<b>Remarks</b>
2.5.2.2	Data quality related elements of S-100 - IHO Universal Hydrographic Data Model		ADCS		
2.5.2.3	Data quality related elements of:				
2.5.2.3.1	S-52 - Specifications for Chart Content and Display Aspects of ECDIS		ADCS		
2.5.2.3.2	S-101 - ENC Product Specification and other S-100-based Product Specifications		ADCS		
<b>2.6</b>	<b>Nautical Publications</b>			<b>2</b>	
2.6.1	Conduct meetings of relevant HSSC WG dealing with nautical publications	DTech	ADDT		
2.6.2	Develop, maintain and extend S-10n - Nautical Information Product Specification	DTech	ADDT		
2.6.3	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech	ADSO		
2.6.3.1	IHO Resolutions in M-3 relating to Nautical Publications		ADDT		
2.6.3.2	S-12 Standardization of List of Lights and Fog Signals		ADSO		
<b>2.7</b>	<b>Tides and Water Levels</b>			<b>2</b>	
2.7.1	Conduct meetings of relevant HSSC WG dealing with tides and water levels	DTech	ADSO		
2.7.2	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech	ADSO		
2.7.2.1	Relevant IHO Resolutions in M-3				
2.7.2.2	S-60 User's Handbook on Datum Transformations involving WGS 84				
2.7.2.3	Standard Tidal Constituent List				
2.7.2.4	Inventory of Tide Gauges used by Member States				
2.7.3	Develop, maintain and extend a Product Specification for digital tide tables	DTech	ADSO		
2.7.4	Develop, maintain and extend a Product Specification for the transmission of real-time tidal data	DTech	ADSO		
2.7.5	Develop, maintain and extend a Product Specification for dynamic tides in ECDIS	DTech	ADSO		
<b>2.8</b>	<b>Digital Data Updating</b>			<b>2</b>	
2.8.1	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech	ADCS		
2.8.1.1	Digital data updating related elements of S-65 - ENC Production Guidance				
2.8.1.2	S-52 Appendix 1 - Guidance on Updating the Electronic Navigational Chart				
<b>2.9</b>	<b>Marine Spatial Data Infrastructures</b>			<b>2 &amp; 4</b>	
2.9.1	Conduct meetings of relevant HSSC WG dealing with MSDI	DTech	ADCS		
2.9.2	Maintain the relevant IHO standards, specifications and publications, including:	DTech	ADCS		
2.9.2.1	C-17 Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices				
2.9.3	Develop training syllabi for MSDI and associated learning subjects, including:	DTech	ADCS		
2.9.3.1	Content for an "introduction to MSDI" training course	-	-		
<b>2.10</b>	<b>Hydrographic Data Acquisition and Processing</b>			<b>2</b>	

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2.10.2	Maintain and extend, when required, the relevant IHO standards, specifications and publications, including:	DTech	not allocated until WG or WP tasks established		
2.10.2.1	S-44 - IHO Standards for Hydrographic Surveys				
<b>2.11</b>	<b>Hydrographic Dictionary</b>			<b>4</b>	
2.11.1	Maintain and extend the IHO Hydrographic Dictionary in English, French and Spanish.	DTech	ADSO		
2.11.2	Develop the Spanish language Wiki version of S-32 with commercial contract support	DTech	ADSO		
<b>2.12</b>	<b>ABLOS</b>			<b>2 &amp; 4</b>	
2.12.1	Organize and prepare ABLOS annual business meeting	DTech	ADSO		
2.12.2	Organize and prepare the biennial ABLOS Conference	DTech	ADSO		Next ABLOS Conference in 2015
2.12.3	Contribute to the revision of IHO publication C-51-TALOS Manual	DTech	ADSO		
<b>2.13</b>	<b>Surface Current</b>			<b>2</b>	
2.13.1	Conduct meetings of relevant HSSC WG dealing with surface currents	DTech	ADSO		
2.13.2	Maintain and extend the relevant IHO standards, specifications and publications, including:	DTech	ADSO		
2.13.2.1	Relevant IHO Resolutions in M-3				
2.13.3	Develop, maintain and extend a Product Specification for the transmission of real-time surface current data	DTech	ADSO		
2.13.4	Develop, maintain and extend a Product Specification for dynamic surface currents in ECDIS	DTech	ADSO		
<b>PROGRAMME 3 - INTER REGIONAL COORDINATION AND SUPPORT</b>					
<b>3.0</b>	<b>Inter Regional Coordination Committee (IRCC)</b>			<b>1 &amp; 2</b>	
3.0.1	Conduct annual meeting of IRCC	DCoord	ADCC		
3.0.1.1	Support the IHB to implement the planning mechanism annually and at the end of each 5-year (3-year) cycle				
3.0.1.2	Contribute to the IHO Annual Report.				
3.0.1.3	Update and implement the IRCC Work Programme				
<b>3.1</b>	<b>Cooperation with Member States and attendance at relevant meetings</b>			<b>1 &amp; 2</b>	
3.1.1	ARHC – Arctic Region Hydrographic Commission	Pres	ADCS		
3.1.2	BSHC - Baltic Sea Hydrographic Commission	DCoord	ADSO		
3.1.3	EAHC - East Asia Hydrographic Commission	Pres	ADDT		Steering Committee Meeting
3.1.4	EAtHC - Eastern Atlantic Hydrographic Commission	DTech	ADCS		
3.1.5	MACHC - Meso American and Caribbean Hydrographic Commission	Pres	ADCC		
3.1.6	MBSHC - Mediterranean and Black Seas Hydrographic Commission	DCoord	ADCC		including BASWG
3.1.7	NHC - Nordic Hydrographic Commission	DTech	ADDT		
3.1.8	NIOHC - North Indian Ocean Hydrographic Commission.	DCoord	ADSO		

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
3.1.9	NSHC - North Sea Hydrographic Commission	DTech	ADSO		
3.1.10	RSAHC - ROPME Sea Area Hydrographic Commission	DCoord	ADSO		
3.1.11	SAIHC - Southern Africa and Islands Hydrographic Commission	Pres	ADDT		
3.1.12	SEPHC - South East Pacific Hydrographic Commission	DTech	ADCC		
3.1.13	SWAtHC - South West Atlantic Hydrographic Commission	DTech	ADCC		
3.1.14	SWPHC - South West Pacific Hydrographic Commission	Pres	ADCS		
3.1.15	USCHC - USA and Canada Hydrographic Commission.	DCoord	ADDT		
3.1.16	HCA - Hydrographic Commission on Antarctica.	Pres	ADCS		
3.1.16.1	HCA to conduct a risk assessment for the Antarctic region and develop a Work Program to improve Antarctic charting				
3.1.17	WEND Working Group	DCoord	ADCC		See also 3.6.2
3.1.18	Industry participation in RHC meetings.	Director & AD responsible for relevant RHC			
3.1.19	Contribute to improving the framework of IHO response to marine disasters.	DCoord	ADSO		
<b>3.2</b>	<b>Increase participation by non-Member States</b>			<b>1 &amp; 3</b>	
3.2.1	EAHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V.	Pres	ADCS		
3.2.2	EAtHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	DTech	ADCS		
3.2.2.1	Maintain contact with pending applicants in the region to encourage the ratification of the IHO Convention				
3.2.2.2	Maintain contact with suspended Member State in the region to encourage its re-insertion in IHO				
3.2.3	MACHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V.	Pres	ADCC		
3.2.3.1	Maintain contact with pending applicant in the region to encourage the ratification of the IHO Convention				
3.2.3.2	Maintain contact with suspended Member State in the region to encourage its re-insertion in IHO				
3.2.4	MBSHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	DCoord	ADCC		
3.2.4.1	Maintain contact with pending applicants in the region to encourage the ratification of the IHO Convention				

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
3.2.4.2	Maintain contact with suspended Member State in the region to encourage its re-insertion in IHO				
3.2.5	NIOHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	DCoord	ADSO		
3.2.6	RSAHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	DCoord	ADSO		
3.2.7	SAIHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V.	Pres	ADDT		
3.2.8	SEPHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V.	DTech	ADCC		
3.2.8.1	Continue the efforts to include Panama as Observer Country to the Commission.				
3.2.9	SWAtHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	DTech	ADCC		
3.2.10	SWPHC - Execute strategy to increase participation of non-Member States in IHO activities and advise them on how to comply with international regulations such as SOLAS V	Pres	ADCS		
3.2.11	RHCs to encourage the approval of pending applications for IHO membership	Director & AD responsible for relevant RHC			
3.2.12	IHO Convention:	Director & AD responsible for relevant RHC			
3.2.12.1	RHCs to encourage the ratification of the IHO Convention by approved applicants.				
3.2.12.2	Secure the ratification of the Protocol of Amendments to the IHO Convention.				
<b>3.3</b>	<b>Capacity Building Management</b>			<b>1 &amp; 4</b>	
3.3.1	CBSC - Capacity Building Sub-Committee	DCoord	ADCC		
3.3.1.1	Organize, prepare, conduct and report annual CBSC meetings				
3.3.1.2	Follow-up the coordination required to execute the action lists agreed				
3.3.1.3	Maintain IHO publication M-2 - <i>The Need for National Hydrographic Services</i>				
3.3.1.4	Contribute to the development of MSDI				
3.3.2	Manage Capacity Building Fund	DCoord	ADCC, MFA		
3.3.2.1	Develop and maintain a CB Management system				
3.3.3	Meetings with other organizations, funding agencies, private sector and academia	DCoord	ADCC		
3.3.3.1	Joint IHO/IMO/WMO/IOC/IAEA/IALA/FIG Capacity Building Meeting				



Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
3.3.3.2	Capacity Building Stakeholders Forum				
3.3.4	IHO Capacity Building Strategy. CBSC to keep the IHO Capacity Building Strategy updated. At each CBSC meeting, the Sub-Committee is to review the Strategy in the light of new elements, update it accordingly and display it in the IHO website.	DCoord	ADCC		
3.3.5	Capacity Building Work Programme	DCoord	ADCC		
3.3.5.1	CBSC to study the CB needs presented to the CBSC by the RHCs, to foster the sharing of lessons learned and to help RHCs to develop best practices				
3.3.5.2	CBSC to develop and propose an annual IHO Capacity Building Work Program (CBWP) to be included in the general IHO WP				
3.3.5.3	CBSC to maintain and control the execution of the approved CBWP				See Annex
3.3.6	Follow-up of CB activities and initiatives, including:	DCoord	ADCC		
3.3.6.1	CBSC to follow-up the CB activities and initiatives, especially those for which the CB Fund and MSs have contributed				
3.3.6.2	To study and install measures to improve the technical work with the Management Plan, i.e. developing a database, aiming at reducing the administrative work				
3.3.7	IBSC - International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers	DCoord	ADCC		
3.3.7.1	Conduct and report annual IBSC meetings				
3.3.7.2	Implement the IBSC Work Programme including				
3.3.7.2.1	IBSC Stakeholders' Seminar				In conjunction with 3.3.3.2
3.3.7.3	Manage the IBSC Fund and report to IHO				
3.3.8	Provide guidance to training institutions	DCoord	ADCC		
3.3.9	Maintain IBSC Publications (C-6, C-47, S-5, S-8)	DCoord	ADCC		
3.3.9.1	IBSC to develop a new Standards framework to separate competency requirements for Cat A and Cat B				
3.3.9.2	C-6 and C-47 updates under contract				
<b>3.4</b>	<b>Capacity Building Assessment</b>			<b>3 &amp; 4</b>	
3.4.1	Technical and advisory visits. RHCs, with the support of the CBSC Chair and IHB, to establish appropriate teams of experts and to schedule and undertake Technical and Advisory Visits to assess the status of hydrography, cartography and aids to navigation in accordance with the IHO CBWP	Director & AD responsible for relevant RHC			See Annex
3.4.2	Review and maintain CB procedures	DCoord	ADCC		
3.4.3	Enhance publication C-55. IHB with the support of the RHCs, CBSC and GGC to develop a new framework for C-55	DCoord	ADCC		
<b>3.5</b>	<b>Capacity Building Provision</b>			<b>2 &amp; 3 &amp; 4</b>	
3.5.1	Raise Awareness on the Importance of Hydrography	DCoord	ADCC		
3.5.2	Technical Workshops, Seminars, Short Courses	DCoord	ADCC		See Annex

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
3.5.3	IHB, in conjunction with IBSC and CBSC, to encourage the development and delivery of new Hydrographic and Nautical Cartography Programs, including the establishment of new Hydrographic Schools where that regional capacity does not exist. Report to the IHO on the results	DCoord	ADCC		
3.5.4	On the Job Training (ashore / on board). CBSC, with IHB support, to investigate “on-the-job training opportunities” ashore and on board (ships of opportunity)	DCoord	ADCC		
3.5.5	IHB, with the support of CBSC and RHCs, to ensure awareness of multilateral or bilateral projects with hydrographic and/or cartographic components, and to provide advice to governments, project managers and funding agencies on the importance of including a hydrographic Capacity Building Component. Report to IHO annually on the results obtained	DCoord	ADCC		
3.5.6	CBSC to foster bilateral agreements in order to help satisfy SOLAS V/9	DCoord	ADCC		
<b>3.6</b>	<b>Coordination of Global Surveying and Charting</b>			<b>2</b>	
3.6.1	C-55 Status of Hydrographic Surveying and Nautical Charting World-wide	DCoord	ADCC		
3.6.1.1	MS to provide annual updates to C-55				
3.6.1.2	IHB to implement new framework for publication C-55				
3.6.1.3	IHB to report periodically to IMO on limitations and requirements for improvements in global charting and associated services				
3.6.2	WEND WG to foster the implementation of the WEND principles, monitor progress and report to IRCC	DCoord	ADCC		See also 3.1.17
3.6.2.1	WG to facilitate the production, distribution and updating of ENC cartographic products ensuring uniform ENC quality and consistency				
3.6.2.2	WG to facilitate the resolution of gaps and overlaps in ENC coverage				
3.6.2.3	WG to facilitate the promotion of RENC co-operation for the benefit of ENC end-users				
3.6.3	Maintain and coordinate ENC schemes, consistency and quality	DCoord	ADCC		
3.6.3.1	RHCs to develop ENC schemes in their regions and coordinate the production and maintenance of ENC				
3.6.4	Maintain and coordinate INT Chart Schemes and improve the availability of the INT Chart Series	DCoord	ADCS		
3.6.4.1	RHCs to coordinate INT Chart Schemes and coordinate the production of INT Chart in their region				
3.6.5	Contribute to monitoring and improving the global status of hydrographic surveying	DCoord	ADCC		
<b>3.7</b>	<b>Maritime Safety Information</b>			<b>1 &amp; 2</b>	
3.7.1	WWNWS-SC - World-Wide Navigational Warning Service Sub-Committee. Organize, prepare, attend and report annual WWNWS-SC meetings	DCoord	ADSO		

Element / Task	Title	Principal Director	Principal Manager	Strategic Direction	Remarks
3.7.2	WWNWS Document Review Working Group. Conduct annual meetings of the WWNWS Document Review WG	DCoord	ADSO		
3.7.3	Maintain and extend the following IHO standards, specifications and publications:	DCoord	ADSO		
3.7.3.1	relevant IHO Resolutions in M-3				
3.7.3.2	S-53 - Joint IMO/IHO/WMO Manual on Maritime Safety Information				
3.7.4	Liaise with IMO and WMO on the delivery of MSI within the GMDSS	DCoord	ADSO		
3.7.5	Participate and contribute to the IMO work items on the modernization of the GMDSS and the development of the e-navigation implementation plan	DCoord	ADSO		
3.7.6	Improve the delivery and exploitation of MSI to global shipping by taking full advantage of technological developments	DCoord	ADSO		
<b>3.8</b>	<b>Ocean Mapping Programme</b>			<b>1 &amp; 2 &amp; 3</b>	
3.8.1	Conduct meetings of relevant GEBCO bodies:	DCoord			
3.8.1.1	Guiding Committee		ADSO		
3.8.1.2	TSCOM		ADDT		
3.8.1.3	SCRUM				
3.8.1.4	SCUFN		ADCS		
3.8.2	Ensure effective operation of IHO Digital Bathymetry Data Center (DCDB)	DCoord	ADDT		
3.8.3	Encourage the contribution of bathymetric data to the IHO DCDB	DCoord	ADDT		
3.8.3.1	Identify priority areas for regional mapping.				
3.8.3.2	Promote data contribution through GEBCO participation in RHCs meetings				
3.8.4	Maintain IHO bathymetric publications, including:	DCoord			
3.8.4.1	B-4 - Information concerning recent bathymetric data		ADDT		
3.8.4.2	B-6 - Standardisation of undersea feature names		ADCS		
3.8.4.4	B-7 - GEBCO guidelines		ADSO		
3.8.4.4	B-8 - Gazetteer		ADCS		
3.8.4.5	B-9 - GEBCO digital atlas		ADDT		
3.8.4.6	B-10 - The history of GEBCO		ADSO		
3.8.4.7	B-11 - GEBCO Cookbook		ADDT		
3.8.4.8	Develop the on-line function of B-4		ADDT		
3.8.5	Contribute to outreach and education about ocean mapping. Increase understanding of the importance of hydrography and interest in following ocean mapping as a career through activities such as:	DCoord	ADSO		
3.8.5.1	Development of outreach materials (paper maps, brochures, web-based presentations) and educational materials;				
3.8.5.2	Printing of GEBCO World Map at various locations in MS				
3.8.6	GEBCO Web site kept current and updated regularly	DCoord	ADDT		
3.8.7	Develop short course and course material on compiling digital bathymetric models (DBMs) to be included in GEBCO from a heterogeneous bathymetric source database. Associated deliverables: -a course curriculum	DCoord	ADSO		

<b>Element / Task</b>	<b>Title</b>	<b>Principal Director</b>	<b>Principal Manager</b>	<b>Strategic Direction</b>	<b>Remarks</b>
3.8.8	Update and enhance the GEBCO Gazetteer (B-8) for internet access	DCoord	ADCS		
3.8.8.1	Provide the GEBCO Gazetteer as a web service via a geospatially enabled database				
3.8.8.2	Develop and make available public and management on-line interfaces to the Gazetteer				

**Annex to IHO Work Programme - Year 2014  
Capacity Building Work Programme (CBWP 2014)**

No.	Events	Responsible	Budget	Spent	Status	Resources
<b>IHO WP Element 3.4: Capacity Building Assessment - 3.4.1 Technical and Advisory Visits</b>						
A-01	Technical visit to Brunei Darussalam	EAHC	4 000	0,00	Led by EAHC Chair Dates TBD	IHO
A-02	Technical visit to Viet Nam	EAHC	4 000	0,00	Led by EAHC Chair Dates TBD	IHO
A-03	Technical Assessment & Advice Visit – Nicaragua	MACHC	9 000	0,00	Led by UKHO Dates TBD	IHO
A-04	Technical visit to Israel	MBSHC	5 000	0,00	Led by Turkey with Greece 30 Jun -3 Jul 2014	IHO
A-05	Technical visit to Georgia	MBSHC	5 000	0,00	Led by Turkey with Russia and Ukraine 22-25Apr 2014	IHO
A-06	Technical Visit to Government high authorities - Jordan	NIOHC	6 000	0,00	Led by Dates TBD	IHO
A-07	Technical Visit to Paraguay	SWAtHC	9 000	0,00	Led by Brazil with IHB 13-16 Jan 2014	IHO
A-08	Technical Assessment & Advice - Samoa	SWPHC	6 000	0,00	Led by Dates TBD	IHO
A-09	MOWCA (all western Africa coastal and island states from Mauritania to Angola) high level visit	EAthC	5 000	0,00	Led by France Dates TBD	IHO
A-10	Technical visit to Lebanon	MBSHC	5 000	0,00	Led by Turkey with France and IHB 4-7 Feb 2014	IHO
	Subtotal of A (Assessment)	-	58 000	0,00		

<b>IHO WP Element 3.5: Capacity Building Provision - 3.5.2 Technical Workshops, Seminars, Courses</b>						
No.	Events	Responsible	Budget	Spent	Status	Resources
P-01	MSI (training on establishment of MSI structure and basic MSI procedures), for NIOHC Members	NIOHC	26 194	0,00		IHO

No.	Events	Responsible	Budget	Spent	Status	Resources
P-02	MSI (training on establishment of MSI structure and basic MSI procedures), for RSAHC Members	RSAHC	21 417	0,00		IHO
P-03	MSI Regional Workshop, for Solomon Is, Tuvalu, Cook Is, Fiji, Samoa, Tonga, Kiribati, PNG, Tokelau, New Caledonia, Niue, Vanuatu, French Polynesia	SWPHC	21 000	0,00		IHO
P-04	Phase 1 Skills: MSI course (3 days) + Introduction to the assessment and promulgation of navigationally significant data (2 days), for EAHC Members	EAHC	19 200	0,00		ROK
P-05	MSI Regional Workshop, for EAHC Members	EAtHC	20 000	0,00		ROK
P-06	Tides and water level for hydrographic survey, for EAHC Members	EAHC	19 000	0,00		ROK
P-07	Sub-regional course on Hydrography (for Spanish speakers), for Guatemala (lead) Belize, El Salvador, Honduras, Nicaragua, Costa Rica and Dominican Republic	MACHC	10 896	0,00		IHO
P-08	Tidal and Water Levels Workshop, for RSAHC Members	RSAHC	19 285	0,00		IHO
P-09	Introduction to Hydrographic Surveying, for SAIHC Members	SAIHC	32 865	0,00		IHO
P-10	Tidal and Water Levels Workshop, for SAIHC Members	SAIHC	24 731	0,00		IHO
P-11	Technical Workshop on Hydro/Cartography River Survey, for SEPHC (8) SWAtHC (3) MACHC (3)	SEPHC	35 000	0,00		IHO
P-12	Solomon Is. National Hydrographic Capability Development	SWPHC	5 000	0,00		IHO
P-13	Advanced Chart Production, for Myanmar	NIOHC	7 000	0,00		ROK
P-14	Advanced ENC Production, for Bangladesh	NIOHC	7 000	0,00		ROK
P-15	Development of a Regional Marine Spatial Data Infrastructure (MSDI) Workshop, for MACHC Members	MACHC	10 000	0,00		IHO
P-16	Development of a Regional Marine Spatial Data Infrastructure (MSDI) Workshop, for NIOHC Members	NIOHC	10 000	0,00		ROK
P-17	Development of a Regional Marine Spatial Data Infrastructure (MSDI) Workshop, for RSAHC Members	RSAHC	10 000	0,00		IHO
P-18	Technical aspects of maritime boundaries, baselines and extended continental shelf, for EAHC Members	EAHC	19 000	0,00		ROK
P-19	CB Management Assistant	IHB	20 000	0,00		IHO
P-20	IMO funded course - Caribbean	IHB	-	-	Led by COCATRAM	IMO

No.	Events	Responsible	Budget	Spent	Status	Resources
P-21	IMO funded course - Africa	IHB	-	-	For Francophone countries	IMO
P-22	IMO funded course - Southwest Pacific	IHB	-	-		IMO
P-23	Cat A Hydrography Programme (USM)	IHB	TBC	0,00	CL 66/2013 Aug 2014-Aug 2015	ROK
P-24	Participation of CB training recipients to the CB Stakeholders Seminar at the IHB (one from Kenya, one from Ukraine)	IHB	3 700	0,00	Led by the IHB 5-6 Mar 2014	Nippon Foundation
P-25	6th Course on Hydrographic Data Processing and Marine Cartography (UKHO)	IHB	-	-	Led by UKHO Sep-Dec 2014 TBC	Nippon Foundation
P-26	GEBSCO Training Project (UNH)	UNH	-	-	TBC	Nippon Foundation
	Subtotal of P (Provision)	-	341 288	0,00		

<b>Total 2014 CBWP</b>	399 288	0,00
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