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South African Navy Hydrographic Office Private Bag X1 Tokai 7966 REPUBLIC OF SOUTH AFRICA 19 March 2012

File ref: FOF/HYD/R/320/19/1

SAIHC Letter No. 1/2012

Mr Thomas Dehling <u>Thomas.dehling@bsh.de</u> Chair of the IHO Capacity Building Sub Committee

Dear Mr Dehling

Subject: SAIHC Capacity Building Projects

The Southern Africa and Islands Hydrographic Commission at its last meeting (Sept 2011, Walvis Bay, Namibia), with due consideration of the IHO CBSC guidelines, approved a Capacity Building Plan which is enclosed to this letter. The SAIHC CB Plan considers the IHO Objectives and Strategic Directions in conjunction with the peculiarities of the SAIHC region. The derived projects therefore focus on achieving these objectives and are not just desirable events.

In accordance with the referred procedures, I submit to the IHO CBSC six projects to be carried out during 2013.

On behalf of the SAIHC membership, may I express my sincere appreciation to the IHO CBSC for the continued support to this Regional Hydrographic Commission.

Yours sincerely

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Chairman Southern Africa & Islands Hydrographic Commission (SAIHC)

Copy: SAIHC Member States IHB, Att. Capt Alberto Costa Neves <u>a.neves@ihb.mc</u>

Enclosure 1: SAIHC Capacity Building Plan

2: SAIHC Capacity Building Projects



INTERNATIONAL HYDROGRAPHIC ORGANIZATION SOUTHERN AFRICA & ISLANDS HYDROGRAPHIC COMMISSION



CAPACITY BUILDING PLAN Programme document for the period 2013-2017

1. INTRODUCTION

1.1. Rationale

The Southern Africa & Islands (SAIHC) region contains three of the worlds 64 major large marine ecosystems, the Benguela current, the Agulhas current and the Somali current. Some of the species and habitats of these currents are unique. The main traffic to the west of the region are the routes from ports in NW Africa to the Cape of Good Hope together with the transatlantic routes for traffic between North and South America and the ten ports in this area.

The shipping lanes along the East Africa coast carry over 30% of the worlds crude oil supplies. This region contains thirteen important commercial ports serving as hubs for traffic emanating from, and destined for Europe, Asia, the Americas and the east and western coasts of Africa. In addition to the large cargo ships travelling internationally, many smaller boats serving local needs ply the coastal waters and harbours. Oil and gas exploration programmes operating throughout the region bring additional risks.

For these reasons, it is crucial that SOLAS contracting Governments undertake hydrographic surveys as and when required, that they arrange for the compilation and publication of hydrographic data, the dissemination and keeping up to date of all nautical information necessary for safe navigation.

The IHO Capacity Building Strategy classifies the development of hydrographic services into three phases:

- those which are in Phase 1: Collection and circulation of nautical information, necessary to maintain existing charts and publications up to date;

- those which are in Phase 2: Creation of a surveying capability to conduct coastal and offshore projects; and

- those which are in Phase 3: Produce paper charts, ENC and publications independently.

Coastal/maritime states have certain treaty obligations (SOLAS) placed on them and the IHO/SAIHC effort aims at assisting states in meeting these obligations. To achieve this a national understanding and coordination effort is required noting that:

- resources (human, time, finance etc) are limited, consequently prioritization is a fundamental issue;

- planning must be realistic;

- longer term training such as CAT A or B are not covered because such training is out of the scope of the IHO CB budget.

Nowadays, the rapidly evolving technology has replaced old navigation paradigms and demands continuous investments in education and training so that the Hydrographic Services can continue to provide high quality products and services which satisfy new demands of the maritime community.

SAIHC is aware of its Member States' efforts to provide quality service to the international maritime community in order to contribute to the safety and security of navigation and human life at sea as well as the preservation of the environment in its region and, as part of the IHO community, to contribute to the achievement of the objectives and directions of the Organization.

1.2. Aims and objectives

The aims of the Plan are:

a) to train staff, at various levels, to ensure a much needed capability on hydrography and nautical cartography, particularly after natural disaster or other incidents which could affect water depths in harbours and approaches; and

b) to comply with the IHO resolutions and guidelines regarding hydrographic and nautical cartographic activities.

The medium term objective of this Plan are:

a) to ensure a basic level of MSI is established in all coastal states to, produce Local/Coastal/NAVAREA Warnings, communicate effectively with the charting authority and implement the MSI elements of GMDSS;

The longer term objectives are:

a) to instruct staff in the region on the methods of carrying out hydrographic surveys, to improve safety of navigation through enhanced navigational products;

b) to promote the establishment of Hydrographic Services (HS) and the evolution of CB Phases of the established ones.

1.3. Priorities

Despite the breadth of need existing in the Region, for the period of 2013 to 2017, priorities should be set in the sequence of the following list, the first of which are the highest:

0 - activities which may promote awareness of national hydrographic obligations;

- 1 activities which may improve the capacity of existing HS in Phase 1;
- 2 activities which may improve the capacity of existing HS in Phase 2; and

3 - activities which may improve the capability of existing HS in Phase 3.

Note the link between the training activities listed in paragraph 2. Activities below, and phases 0 to 3 listed above

The current hydrographic capacity status of countries/territories of the region is in Annex $\underline{\mathbf{A}}$.

1.4. Methodology and Procedures

This Plan will be reviewed each year, and adjustments made as necessary.

Each year the Commission will decide responsibilities for the programmed events of the subsequent year.

The SAIHC Capacity Building Coordinator will send to the Chair, no later than January 31^{st} of each year details of all planned projects. The projects must be written in the standards established by the IHO CBSC (see Annex <u>B</u>).

Projects supported by IHO CB Fund must follow the IHO CBSC procedures published at the IHO website.

The Chair will check the proposed projects and, if requesting IHO CB Fund support, will send them to the IHO CBSC Chair and Secretary no later than MARCH 15th, otherwise, will take the appropriate action.

2. Activities

Phase	Activity	Project Objective	Target Audience
0.1	<u>Technical visits Type 1</u> High level technical visit to governmental authorities	To raise government awareness of their SOLAS treaty obligations	Related Ministries and Heads of National Agencies, particularly governmental decision makers

Phase	Activity	Project Objective	Target Audience
0.2	Technical visits Type 2 Technical assessment and advice visit	Provide advice to identify how coastal states meet their hydrographic and MSI reponsibilities	Maritime Sector National Agencies. Stakeholders and decision makers
1.1	MSI Course (3 days) Training on establishment of MSI structure and basic MSI procedures	To establish a core group of trained persons to deal with MSI	MSI Practioners
1.2	Phase 1 Skills (5 days) An introduction to the assessment and promulgation of navigationally significant data	To provide a core group with the skills and knowledge to assess and promulgate navigationally significant information to the wider maritime community (this course supports the MSI course)	MSI Practioners
2.1	Basic Hydrographic Survey Course (10 days)	To provide awareness of national hydrography, hydrographic surveying and nautical cartography	Maritime Sector Decision Makers
2.2	Port and Shallow Water Survey Course (5 days)	A workshop to aid exchange of information and ideas about the challenges faced by port and shallow water surveyors in the SAIHC region	Port Surveyors
2.3	<u>MBES Processing (5</u> <u>days)</u>	To train a group of hydrographic surveyors the techniques required to post-process MBES data	Hydrographic Practioners
2.4	<u>MSDI and Database</u> Management (5 days)	To give participants an understanding of spatial data infrastructures (SDI) including the importance and role of data management and databases	Government Planners
2.5	Tides and Water Level Workshop (5 days)	To provide fundamental knowledge and understanding of tides and water level, and their applications for hydrographic surveying and mapping activities	Hydrographic Practioners
2.6	Seabed Classification Workshop (5 days)	To provide a group of professionals with the skill and knowledge to use acoustic techniques to map extensive seabed surfaces and to determine the products of seabed mapping	Hydrographic Practioners
3.1	Basic ENC and ENC Production course (10 days)	To train a group of professionals with a practical introduction to S-57 data	Cartographic Practioners
3.2	ENC Production and QA (5 days)	To train a group of professionals to verify and validate S-57 data	Cartographic Practioners
3.3	Module 1 – Marine Cartography of the CAT B Cartographic Course (5 weeks)	To provide participants delegates with a practical understanding of nautical cartography and the necessary skills to carry out routine nautical cartographic skills	Cartographic Practioners
3.4	Module 2 – Hydrographic Data Processing of the CAT B	To provide participants with a practical understanding of hydrographic data processing the	Cartographic Practioners

Phase	Activity	Project Objective	Target Audience
	Cartographic Course (5 weeks)	skills to carry out accurate assessment and an appreciation of the issues surrounding chart maintenance	
3.5	<u>Module 3 – Electronic</u> <u>Navigational Charts</u> (ENC) of the CAT B <u>Cartographic Course (5</u> <u>weeks)</u>	To provide a group of professionals with the skill and knowledge to produce ENCs	Cartographic Practioners
3.6	<u>Law of the Sea</u> Workshop (5 days)	To teach participants the basic technical principles applicable to maritime boundary delimitation. The delegates should be from technical hydrographic or cartographic backgrounds	Maritime Sector Decision Makers
3.7	Tsunami inundation mapping workshop (5 days)	To improve the modelling and presentation of regional tsunami inundation maps	Maritime Sector and emergency planning

3. Capacity Building Program The program of capacity building activities for the period 2013 - 2017 is detailed in Annex <u>C</u>.

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SAIHC Counties/Territories Capacity Building Phase Stage

	Country / Territory	CB Phase 0	CB Phase 1	CB Phase 2	CB Phase 3	Last TV
1	Angola				UKHO	2008
2	France		Self	Self	Self	
3	Kenya				UKHO	2010
4	Madagascar				SHOM	2011
5	Malawi				Self	2011
6	Mauritius				UKHO/ India	
7	Mozambique					2007
8	Namibia				RSA	2011
9	Norway		Self	Self	Self	
10	Portugal		Self	Self	Self	
11	Republic of South Africa		Self	Self	Self	
12	Seychelles				UKHO	
13	Tanzania				UKHO	2007
14	United Kingdom		Self	Self	Self	
15	Comoros				SHOM	2011

Reference: http://www.iho-ohi.net/mtg_docs/CB/CBA_TechnicalVisits.htm

KEY TO REQUIRED TRAINING ACTIVITY

Technical visit
MSI Training and development
Hydrographic survey training and development
Cartographic training and development



PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	
Submitting RHC/Country:	
Date:	
Institution executing the	
project:	
Name of responsible:	
Address:	
Telephone:	
Fax:	
e-mail:	

GENERAL SPECIFICATIONS

(Please provide detailed information in Annex of no more than three pages)

Background information	
Justification of the project	

Countries involved	
Exposition of the problem	
General objective	
Specific objectives	
Outputs/Products	
Other deliverables	
Achievements and awaited	
benefits	

Schedule of activities	

Contribution	
by countries	
involved	
Contribution	

by other	
parties	
Contribution	
expected from	
CBCFund	
Total Cost	
(euros)	
Breakdown of	
costs	

From CBC	
Fund (item	
and amount)	

Sponsor RHC	Year of Execution	Country/ Countries involved	Priority/ Status	Project Name	Project Objective	Benefits	Assistance required	Cost	Allocation and Priority (to be filled by CBC)	Contact Person

Name and Signature of the RHC Chairman

Annex C to CB Plan Capacity Building Program for the period 2013 – 2017

2013				
Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
MSI Course (3 days)	For identified coastal states	SAIHC CB Coordinator		
Basic Hydrographic Survey Course (10 days)	For identified coastal states	SAIHC CB Coordinator		
Law of the Sea Workshop (5 days)	For identified coastal states	SAIHC CB Coordinator		
MSDI and Database Management (5 days)	For identified coastal states	SAIHC CB Coordinator		
Chart Production (on the job training) 10 days	For Portuguese speakers only	SAIHC CB Coordinator		Training venue = Mozambique Training provider = Brazil
Hydrographic Survey (on the job training) 10 days	For Portuguese speakers only	SAIHC CB Coordinator		Training venue = Mozambique Training provider = Brazil

2014

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical and	Repeat visits to	IHO and		
Advisory Visits	selected coastal states	SAIHC		
Basic ENC and ENC	For identified coastal	SAIHC CB		
Production Course	states	Coordinator		
(10 days)				

2015

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.

MSI Course (3 days)	For identified coastal	SAIHC CB	
	states	Coordinator	
Basic Hydrographic	For identified coastal	SAIHC CB	
Survey Course (10	states	Coordinator	
days)			
MSDI and Database	For identified coastal	SAIHC CB	
Management (5	states	Coordinator	
days)			

	Beneficiaries			
Activity	Countries /	Responsible	Period	Obs.
	Territories			
Technical and	Repeat visits to	IHO and		
Advisory Visits	selected coastal	SAIHC		
	states			
Basic ENC and ENC	For identified coastal	SAIHC CB		
Production Course	states	Coordinator		
(10 days)				

	Beneficiaries			
Activity	Countries /	Responsible	Period	Obs.
	Territories			
MSI Course (3 days)	For identified coastal	SAIHC CB		
	states	Coordinator		
Basic Hydrographic	For identified coastal	SAIHC CB		
Survey Course (10	states	Coordinator		
days)				
Law of the Sea	For identified coastal	SAIHC CB		
Workshop (5 days)	states	Coordinator		
MSDI and Database	For identified coastal	SAIHC CB		
Management (5	states	Coordinator		
days)				



SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	Chart Production - on the job training		
Submitting RHC/Country:	SAIHC / Mozambique		
Date:	2013		
Institution executing the	Instituto Nacional de Hidrografia e Navegação		
project:	(INAHINA), Mozambique		
Name of responsible:	Humberto Raul Mutevuie		
Address:	Av Karl Marx No. 153		
	P.O. Box No. 2089		
	МАРИТО		
Telephone:	+ 258 2 1 430 186/8 - 428 670		
Fax:	+ 258 2 1 430 185		
e-mail:	hmutevuie@yahoo.com.br		
	mutevuie@inahina.gov.mz		

GENERAL SPECIFICATIONS

Background information	There is extremely limited capacity within SAIHC to	
	take responsibility for, or effectively contribute to the	
	nautical charting of their waters. This includes the	
	skills required to critically analyse data for its impact	
	upon maritime safety. An improved level of capability	
	is necessary to raise the profile of nautical charting	
	and knowledge of what to ask for to improve access to	
	data collected for other purposes or by other	
	organizations, but which should be used to improve	
	navigation safety.	
	INAHINA, since 2006 is producing its own nautical	
	paper charts. Technology is updating constantly	
	demanding constant personnel training.	
	Additionally, paper charts are the base for RASTER	
	Charts and ENC, being necessary to optimize the	
	production process.	

Justification of the project	 Nautical cartographic skills and the ability to recognize and quantify data for its impact upon charting are essential pre-requisites to SAIHC / Mozambique taking a greater role in charting of their national waters, whether by proactively acquiring and assessing data for an acknowledged charting authority, or for inclusion in nationally produced charts. INAHINA personnel have, basic, theoretical knowledge. English language is already a problem (<u>the training will be held in Portuguese</u>). On the job training provides training to the whole team at a similar cost to one person being trained abroad. There will no expenditures other than air tickets, accommodation, and food. The technology evolution demand from the Hydrographic Offices changes to ensure the maintenance of a Paper Chart product in accordance with the maritime community needs. This training would provide technical and practical lectures about possibilities and its correlation with ENC and paper Chart production improving the understating of them and their workflow by the involved Hydrographic Offices. As a consequence the ENC and Paper Chart production quality would be improved. The training will give particular emphasis on the main problems and aspects involving the software and workflow in Paper Chart and ENC production.
Countries involved	Mozambique, Angola (2 students) and Brazil.
Exposition of the problem	Individual SAIHC nations / Mozambique cannot fund appropriate staff to undertake any recognized course.
General objective	 Establish a base level of source data analysis and nautical cartographic skills to: promote a reliable flow of MSI information from Mozambique (INAHINA) to its NAVAREA to improve maritime safety; establish credibility and an appropriate level of competency within Mozambique (INAHINA) when seeking and acquiring hydrographic data and other nautical information.
Specific objectives	– Training for 10 students.

	 To provide skills in identifying knowledge gaps, and their significance, within existing nautical charts and publications. To increase the ability of Mozambique (INAHINA) to target potential suppliers of hydrographic and other nautical information.
Outputs/Products	Delivery of nautical cartography training course (2 weeks).
Other deliverables	Nil
Achievements and awaited benefits	Improved ability to manage charting information and conduct nautical cartography
Schedule of activities	 This course is due to be delivered in the first half of 2013 so planning will need to commence in 2012. It is intended to follow the lectures as described below: Exposition of Paper chart production methodology Exposition of paper chart production software and methodology Training with paper chart production software Exposition of digital chart production software Training with digital chart production software

Contribution by countries	- Venue to be provided by Mozambique.		
involved	- Brazil will provide instructors.		
Contribution by other	Not programmed.		
parties			
Contribution expected from CBC Fund	Air tickets, hotels, transportation and class material for one instructor from Brazil and two students from Angola.		
Total Cost (Euros)	€ 12,415.00		
	Instructors	Air tickets: € 715.00	
Breakdown of costs		Per diem: € 3,500.00	
	Students from	Air tickets: €1,200.00	
	Angola (two) Per diem: €7,000.00		
From CBC Fund (item and	Air tickets: € 1,915.00		
amount)	Per diem: € 10,500		

Sponsor RHC	Year of Execution	Country/ Countries involved	Priority/ Status	Project Name	Project Objective	Benefits	Assistance required	Cost	Allocation and Priority (to be filled by CBC)	Contact Person
SAIHC	2013	Mozambi que Angola Brazil	High	Chart Produc tion trainin g course	To increase the Mozambique / INAHINA and Angola/ IHSMA capacity to properly produce digital and Paper Charts according to the new available technologies.	The more qualified hydrographers and cartographers greater would benefit the final quality of Nautical Charts. The main purpose is a better understanding of the current production softwares and methodology and to enhance the Nautical Charts quality.	€ 12,415 from CB Fund	Total cost of € 12,415 from CB Fund		Lt. Cmd. Sebastião Simões de Oliveira (DHN)

Name and Signature of the RHC Chairman ...

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(A. KAMPFER) HYDROGRAPHER SA NAVY: CAPTAIN



SUBMISSION MODEL

IDENTIFICATION	N

Project Number :

Project Name:	Hydrographic surveys on job training
Submitting RHC/Country:	SAIHC / Mozambique
Date:	2013
Institution executing the project:	Instituto Nacional de Hidrografia e Navegação (INAHINA), Mozambique
Name of responsible:	Humberto Raúl Mutevuie
Address:	Av Karl Marx No. 153 P.O. Box No. 2089 MAPUTO
Telephone:	+ 258 21 430 186/8 - 428 670
Fax:	+ 258 21 430 185
e-mail:	hmutevuie@yahoo.com.br mutevuie@inahina.gov.mz

GENERAL SPECIFICATIONS

Background information	There is extremely limited capacity within SAIHC nations to take responsibility for, or effectively contribute to the surveying or management of survey projects of their waters.
Justification of the project	 Regional requirement. The S-44 (5th ed) standards requires better description of survey data quality. INAHINA personnel have, basic, theoretical knowledge. English language is already a problem (<u>the training</u> will be held in Portuguese).
	- On the job training provides training to the whole team at a similar cost to one person being trained abroad.

	 There will no expenditures other than air tickets, accommodation, and food.
Countries involved	Mozambique, Angola (two students) and Brazil.
Exposition of the problem	Recently IHO delivered new standards for hydrographic surveys (S-44, 5 th ed.), which detailed better the uncertainties issues. With this training course Mozambique (INAHINA) will have the opportunity to exchange experiences and enhance their knowledge about this issue. Individual SAIHC nations / Mozambique cannot fund appropriate staff to undertake any recognized course.
General objective	 Establish a base level of hydrographic data collection, processing, and the production of elements to nautical chart production: promote a reliable flow of MSI information from Mozambique (INAHINA) to its NAVAREA to improve maritime safety. establish credibility and an appropriate level of competency within Mozambique (INAHINA) when seeking and acquiring hydrographic data and other nautical information.
Specific objectives	To train survey operations personnel in accordance with Phase 2 of IHO's Capacity Building procedures.Training for 10 students.
Outputs/Products	To train a group of professionals in the basics of hydrography to be capable of producing basic hydrographic services. The more qualified hydrographers would benefit the final accuracy of hydrographic surveys. The main purpose is to meet the IHO-S44 standards and enhance the Nautical Charts quality.
Other deliverables	Improve the supply of survey and related hydrographic information to regional charting authorities.
Achievements and awaited benefits	Improved understanding of survey requirements and the operation of basic equipment
Schedule of activities	 This course is due to be delivered in the first half of 2013 so planning will need to commence in 2012. It is intended to follow the lectures as described below: Exposition on the use of multibeam for hydrographic data collection; Methodology on data processing, analyses and data

database.		 quality control; Data archiving and establishment of hydrographic database.
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Contribution by countries involved	 Venue to be provided by Mozambique. Brazil will provide instructors. 			
		1		
Contribution by other parties	Not programmed.			
Contribution expected from CBC	Air tickets, hotels,	transportation and class material for one		
Fund	instructor from Bra	azil.		
Total Cost (euros)	€12,415			
	Instructors	Air tickets: € 715.00		
Breakdown of costs		Per diem: € 3,500.00		
	Students from	Air tickets: € 1,200		
	Angola (two)	Per diem: € 7,000		
From CBC Fund (item and	Air tickets: €1,915.00			
amount)	Per diem: €10,500.00			

Sponsor RHC	Year of Execution	Country/ Countries involved	Priority /Status	Project Name	Project Objective	Benefits	Assistance required	Cost	Allocation and Priority (to be filled by CBC)	Contact Person
SAIHC	2013	Mozambique Angola Brazil	High	Hydrogra phic surveys on job training	To increase the Mozambique / INAHINA capacity to properly acquire and process hydrographic data according to the new available technologies.	The more qualified hydrographers would benefit the final accuracy of surveys. The main purpose is to meet the IHO-S44 standards and enhance Nautical Charts quality.	€12,415 from CB Fund	Total cost of €12,415 from CB Fund		Lt. Cmd. Sebastião Simões de Oliveira (DHN)

Name and Signature of the RHC Chairman ...

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(A. KAMPFER) HYDROGRAPHER SA NAVY: CAPTAIN



PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Drojaat Nama	Introduction to Hydrographic Surveying and
rroject Name:	introduction to frydrographic Surveying and
	Nautical Charting
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)
Date:	Mid to late 2013
Institution executing the	UKHO
project:	
Name of responsible:	J Bryant (Sponsor)
Address:	United Kingdom Hydrographic Office
	Admiralty Way
	Taunton
	TA1 2DN
	UK
Telephone:	+44 1823 337900 x 3821
Fax:	+44 1823 284077
e-mail:	jeff.bryant@ukho.gov.uk

<u>GENERAL SPECIFICATIONS</u> (Please provide detailed information in Annex of no more than three pages)

Background information	There is extremely limited capacity within many SAIHC nations to take responsibility for, or effectively contribute to the surveying or management of survey projects of their waters.
Justification of the project	Regional requirement

	Madagagaga Malawi Mauriting Company
	Madagascar, Malawi, Maurinus, Comoros,
Countries involved	Kenya, Namibia, Seychelles and Tanzania
Exposition of the problem	Individual SAIHC nations cannot fund
_	appropriate staff to undertake any recognized
	course
General objective	To establish capacity so that maritime authorities
	can provide high quality products and services to
	comply with the requirements for safety of
	navigation in the area
Specific objectives	To train survey operations personnel in
	accordance with Phase 2 of IHO's Capacity
	Building procedures
Outputs/Products	To train a group of professionals in the basics of
	hydrography to be capable of understanding
	basic hydrographic services
Other deliverables	Improve the supply of survey and related
	hydrographic information to regional charting
	authorities

Achievements and awaited	Improved understanding of survey requirements
benefits	and the operation of basic equipment

Schedule of activities	10 day course

Contribution by countries	Training facilities to be identified. UKHO will provide assistance in organizing and managing the training if required.
IIIvoiveu	
Contribution	UKHO will provide appropriately qualified lecturer(s)
by other	
parties	
Contribution	Yes
expected from	
CBCFund	
Total Cost	€14,400
(euros)	
Breakdown of	€1,300 per student to include hotel, flights and lœal expenses (eight
costs	in total)
	€4,000 for UKHO trainer (to include hotel, flightsand local
	expenses)

From CBC	
Fund (item	
and amount)	

Sponsor PHC	Year of Execution	Country/	Priority/ Status	Project Nomo	Project Objective	Benefits	Assistance	Cost	Allocation and Priority (to be	Contact Porson
K IIC	EXCULION	involved	Status	TVAILLE	Objective		requireu		filled by CBC)	1 01 5011
SAIHC	2013	Madagasc		Introducti	To train	Improved		€14,400		J Bryant
		ar,		on to	survey	understanding				SAIHC
		Malawi,		Hydrogra	operatio	of survey				CB
		Mauritius,		phic	ns	requirements				Coordinat
		Comoros,		Surveyin	personne	and the				or
		Kenya,		g and	l in	operation of				
		Namibia,		Nautical	accordan	basic				
		Seychelle		Charting	ce with	equipment				
		s and		_	Phase 2					
		Tanzania			of IHO's					
					Capacity					
					Building					
					procedur					
					es					

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Name and Signature of the RHC Chairman



PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	Technical aspects of Maritime boundaries, baselines
	and the extended continental shelf (5 days)
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)
Date:	Between January and early June 2013
Institution executing the	UKHO LOS Team
project:	
Name of responsible:	Jeff Bryant, SAIHC CB Coordinator
Address:	UKHO, Taunton, Somerset TA1 2DN
Telephone:	+44 1823 337900 x3821
Fax:	+44 1823 284077
e-mail:	jeff.bryant@ukho.gov.uk

<u>GENERAL SPECIFICATIONS</u> (Please provide detailed information in Annex of no more than three pages)

Background information	LOS awareness has been identified to be lacking in the region					
Justification of the project	Technical aspects of maritime boundaries, baselines and the extended continental shelf:					
	 Hydrographic Offices of the SAIHC are getting more involved in advising their respective Governments on the technical aspects of maritime boundaries and baselines. SAIHC Member States (MS) have expressed a need for their officers to have a fundamental and common understanding of the technical aspects of maritime boundaries and there application to hydrography. 					

Countries involved	Angola, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Comoros, RSA
Exposition of the problem	No in-country expertise in this field
General objective	To teach participants the basic technical principles applicable to maritime boundary delimitation. The delegates should be from technical hydrographic or cartographic backgrounds.
Specific objectives	Providing a professional course to bridge the gap among MS in the basics of hydrography/cartography and its application to maritime baselines and the marine environment.
Outputs/Products	By the end of the week the students should be able to understand the importance of technical

	aspects in the delimitation process, the legal				
	principles behind boundary delimitation, and				
	play their role in a boundary team alongside				
	lawyers, politicians and other experts.				
Other deliverables					
Achievements and awaited	To create greater awareness of the application of				
benefits	hydrography to the marine environment				

Schedule of activities	5 day workshop

	Nil
Contribution	
by countries	
involved	
Contribution	UKHO will provide x 2 LOS experts to deliver the training course
by other	free of charge
parties	
	UKHO will cover the cost of the international flights for the trainers
	Hosting nation (yet to be decided) to cover the cost of the training
	materials (mostly copying)
Contribution	14,980 euros
expected from	
CBCFund	
Total Cost	14,980 euros
(euros)	
Breakdown of	10 flights = 3500 euros
costs	6 nights accommodation for 10 students $=$ 9000 euros
	6 nights accommodation for 2 trainers $= 1800$ euros
	Conference facilities = 680 euros

From CBC	14,980 euros
Fund (item	
and amount)	

Sponsor	Year	Country/	Priorit	Project Name	Project Objective	Benefits	Assistance	Cost	Allocation and	Contact
KHU	oi Execu	involved	y/Stat us				requirea		filled by CBC)	Person
	tion									
SAIHC	2013	Angola,		Technical	Providing a	To create		14,980		J Bryant
		Kenya,		aspects of	professional	greater		euros		SAIHC
		Madagascar,		Maritime	course to bridge	awareness of				CB
		Malawi,		boundaries,	the gap among	the				Coordinat
		Mauritius,		baselines	MS in the	application of				or
		Mozambique,		and the	basics of	hydrography				
		Namibia,		extended	hydrography/	to the marine				
		Seychelles,		continental	cartography and	environment				
		Tanzania,		shelf (5	its application					
		Comoros,		days)	to maritime					
		RSA		-	baselines and					
					the marine					
					environment					

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Name and Signature of the RHC Chairman



PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	Development of a Regional Marine Spatial Data
5	Infrastructure (MSDI) Workshop
Submitting	SAIHC (as part of the approved SAIHC CB Plan)
RHC/Country:	
Date:	Q1or Q2 in 2013
Institution executing the	SAIHC/UKHO
project:	
Name of responsible:	Jeff Bryant, SAIHC CB Coordinator
Address:	UKHO, Taunton, Somerset TA1 2DN
Telephone:	+44 1823 337900 x3821
Fax:	+44 1823 284077
e-mail:	jeff.bryant@ukho.gov.uk

GENERAL SPECIFICATIONS (Please provide detailed information in Annex of no more than three pages)

	The IHO definition of Hydrography supports "marine
Background information	activities including economic development, security and
C	defence, scientific research and environmental protection".
	One of the objectives of the organization identifies the
	importance of the development of the sciences in the
	field of hydrography and the techniques employed in
	descriptive oceanography.
	Within the HO community, there remains an incomplete
	understanding of the interacting systems and sciences that
	operate in the world's oceans and coastal areas. Pressure is
	now growing globally to improve that understanding. This
	Workshop approach highlights the relevance of MSDI in the
	development of a framework for Coastal and Marine Spatial
	Planning programs (MSP) at the sub national, national and
	or regional levels. It provides an approach to introduce and
	framework of a National Spatial Data Infrastructure (NSDI)
	through the development and later delivery of a series of
	global workshops The workshops will utilize a panel of
	recognized leaders and experts in the various components of
	MSDI development as well expertise and experience in
	developing NSDI. The workshops will build on the work
	undertaken by the MSDIWG by providing a practical
	platform of knowledge transfer to enable MS's to engage
	and actively participate in MSDI and MSP development. In
	this way the HO community will be able to inform and
	shape the way MSDI is delivered.
	Regional and / or National requirement
Justification of the project	

Countries involved	SAIHC Member and Associate States will be beneficiaries					
Countries involved	of this workshop					
Exposition of the problem	Individual Nations cannot fund appropriate staff to undertake any recognized course just at the time when they are required to respond to global challenges in the marine and coastal zone.					
General objective	There is a particular urgent need to address issues associated with MSDI in this region due to the conflicts in use of the regional sea space, dwindling resources, lack of up to date and reliable hydrographic and oceanographic data, the threats posed by climate change, coastal inundation and the need for parties to work more closely together to ensure long term economic and social sustainability. The workshop will enhance and increase understanding, confidence and provide practical insight to delegates as to what measures can be taken to develop and control this framework and what can be accomplished through development of a robust and active program of real time observations, data capture and evaluation, data management, data sharing, exchange and improved access to information to underpin modeling and visualization of the underwater and coastal environment. The workshop will develop the appreciation of what is needed and how to measure and understand interaction of systems and to monitor progress over time to reach defined goals.					
Specific objectives	Introduce MSDI to the attending delegates as the marine component of an SDI and provide practical assistance in developing capability at the regional and national level. MSDI encompasses all marine geographic and business information that supports decision making processes and asset management.					
Outputs/Products	Increased and enhanced understanding of MSDI and its relevance to national, regional, and global development success through the provision of tools, solutions and case studies to engage and contribute to MSDI development.					
Other deliverables	Creation of a new knowledge base within the IHO community which MS's can access and learn from. The workshop approach will be supported by FIG and IOC.					
Achievements and awaited benefits						

Schedule of activities	5 day course

Contribution by countries involved	Venue to be decided at the next SAIHC meeting
Contribution by other parties	3 international subject matter experts plus regional representation will be assembled to provide content preparation, organization, presentation of lectures, sharing of best practice, delivery of case studies and factual information for the workshop across the spectrum of SDI subject areas including Marine Spatial Planning, Data Management, Sharing and Re- use, Environment and Conservation as well as COP-10 UNEP Strategic

	Plan 2010-15 on Biodiversity.	
Contribution	Yes	
expected from		
CBCFund		
Total Cost	€26,100	
(euros)		
Breakdown of	Delegates (x10)	
costs (subject	Flights: 10 x €300 *	€3000
to	Hotel: 6 nights x 10 x €120 per night *	€7200
confirmation)	Per diem: 6 days x 10 x €48 per day *	€2880
•••••••••••••	Experts (x3)	
	Flights: 3 x €1000	€3000
	Hotel: 6 nights x 3 x €120	€2160
	Logistics	
	Room: 5 days x €60 per day#	€300
	A/V and IT: 5 days x $\in 120$ per day#	€600
	Ground Transport:	€480
	Refreshments:	€480
	Lecturer fees	
	5 days (x3) x €400	€6000
	TOTAL	€26,100
	* Cost excludes two in-country delegates	# provided by host organisation

From CBC	Training and education	€26,100
Fund (item		
and amount)		

Sponsor	Year of	Country/	Priority/	Project	Project	Benefits	Assistance	Cost	Allocation and	Contact
RHC	Execution	Countries	Status	Name	Objective		required		Priority (to be	Person
		involved							filled by CBC)	
SAIHC	2013	SAIHC	Priority 5	Develop	Introduce	Increased and	Fund Travel	€ 26,100		Jeff Bryant
		Member		ment of	MSDI to	enhanced	&			(SAIHC
		States		а	the	understanding of	subsistence			CB
				Regional	attending	MSDI and its	for up to 10			Coordinator)
				Marine	delegates as	relevance to	students,			
				Spatial	the marine	national, regional,	together			
				Data	component	and global	with x3			
				Infrastr	of an SDI	development	MSDI			
				ucture	and provide	success through the	Expert			
				(MSDI)	practical	provision of tools,	trainers			
				Worksh	assistance	solutions and case				
				ор	in	studies to engage				
				_	developing	and contribute to				
					capability at	MSDI				
					the regional	development.				
					and national	-				
					level					

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Name and Signature of the RHC Chairman



PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	MSI (training on establishment of MSI structure and			
	basic MSI procedures)			
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)			
Date:	2013			
Institution executing the	IHB/WWNWS			
project:				
Name of responsible:	Mr Peter M Doherty			
Address:	US NAVAREA Coordinator			
	Maritime Safety Information Division			
	NGA			
	4600 Sangamore Road			
	Mail Stop D-44			
	Bethesda			
	Maryland 20816-5003			
	United States of America			
Telephone:	+1 (301) 227 7646			
Fax:	+1 (301) 227 3731			
e-mail:	Peter.M.Doherty@nga.mil			

GENERAL SPECIFICATIONS (Please provide detailed information in Annex of no more than three pages)

	MSI awareness has been identified to be lacking in the
Background information	region
	Regional requirement
Justification of the project	

	Angola, Kenya, Madagascar, Malawi, Mauritius,
Countries involved	Mozambique, Namibia, Seychelles, Comoros and
	Tanzania
Exposition of the problem	Majority of countries in the region have no MSI
	capability although personnel and structures are
	available
General objective	To establish capacity in MSI so that Maritime
	Authorities can provide high quality services to
	comply with the basic requirements for safety of
	navigation in the area
Specific objectives	Train personnel in accordance with Phase 1 of
	IHO's capacity building procedures
Outputs/Products	To establish a core group of trained persons to
	deal with MSI
Other deliverables	Supply of information to charting authorities to
	assist with chart maintenance
Achievements and awaited	Improving maritime safety and compliance with

Schedule of activities	3 day course
Past and/or current related	WWNWS Training course for SAIHC
projects supported by CBSC or	members
other sources	

Contribution by countries involved	Training facilities to be identified
Contribution by other parties	Lecturers provided by WWNWS
Contribution expected from CBCFund	Yes
Total Cost (euros)	11,000 euros
Breakdown of costs	8,000 euros (Hotel, flights and local expenses for 10 students @ 800 euros each)
	3,000 euros (Hotel, flights and local expenses for lecturers)

From CBC		
Fund (item		
and amount)		

Sponsor	Year of	Country/	Priority/	Project	Project	Benefits	Assistance	Cost	Allocation and	Contact
кнс	Execution	Countries	Status	Name	Objective		required		Priority (to be filled by CBC)	Person
SAIHC	2013 (second half)	involved SAIHC Member States	Priority 1	MSI (training on establish ment of MSI structur e and basic MSI procedu res)	To establish capacity in MSI so that Maritime Authorities can provide high quality services to comply with the basic requirements for safety of navigation in	Improving maritime safety and compliance with SOLAS	Fund Travel & subsistence for up to 9 students, together with x2 MSI trainers	€ 11,000	filled by CBC)	Jeff Bryant (SAIHC CB Coordinator)
					the area					

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Name and Signature of the RHC Chairman