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## SAIHC Letter No. 1/2014

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 2013, Lisbon, Portugal), considering the IHO CBSC guidelines, approved a Capacity Building Plan which follows as Enclosure 1 to this letter. As can be seen, the SAIHC CB Plan considers the IHO Objectives and Strategic Directions, together with the peculiarities of the SAIHC region. Therefore the derived projects focus on achieving these objectives and are not just desirable events.

Accordingly the referred procedures, I submit to the IHO CBSC two projects to be carried out during 2015, which may be found at Enclosure 2.

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

Enclosure 1: SAIHC Capacity Building Plan

2: SAIHC Capacity Building Projects

Enclosure 1



## 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  $\underline{A}$ .

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 15<sup>th</sup>, 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 raise government awareness of their SOLAS treaty obligations	Related Ministries and Heads of
	to governmental authorities		National Agencies,

Phase	Activity	Project Objective	Target Audience
			particularly governmental decision makers
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	<u>MSI Course (3 days)</u> 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	MBES Processing (5 days)	To train a group of hydrographic surveyors the techniques required to post-process MBES data	Hydrographic Practioners
2.4	MSDI and Database 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	<u>Module 1 – Marine</u> <u>Cartography of the CAT</u> <u>B Cartographic Course</u> (5 weeks)	To provide participants delegates with a practical understanding of nautical cartography and the necessary skills to carry out routine	Cartographic Practioners

Phase	Activity	Project Objective	Target Audience
		nautical cartographic skills	
3.4	Module 2 – Hydrographic Data Processing of the CAT B Cartographic Course (5 weeks)	To provide participants with a practical understanding of hydrographic data processing the skills to carry out accurate assessment and an appreciation of the issues surrounding chart maintenance	Cartographic Practioners
3.5	<u>Module 3 – Electronic</u> <u>Navigational Charts</u> (ENC) of the CAT B <u>Cartographic Course (5</u> weeks)	To provide a group of professionals with the skill and knowledge to produce ENCs	Cartographic Practioners
3.6	Law of the Sea 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	N/R
3	Kenya				UKHO	2012
4	Madagascar				SHOM	2011
5	Malawi				Self	2011
6	Mauritius				UKHO/ India	2012
7	Mozambique					2012
8	Namibia				RSA	2011
9	Norway		Self	Self	Self	N/R
10	Portugal		Self	Self	Self	N/R
11	Republic of South Africa		Self	Self	Self	N/R
12	Seychelles				UKHO	2012
13	Tanzania				UKHO	2012
14	United Kingdom		Self	Self	Self	N/R
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)

<b>Background information</b>	
Justification of the project	

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

Schedule of activities	

# **RESOURCES**

Contribution by countries involved	
Contribution by other parties	
Contribution expected from CBCFund	

Total Cost	
(euros)	
Breakdown of	
costs	

From CBC	
Fund (item	
and amount)	

# PROJECT SUMMARY

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

<b>Capacity Building</b>	Drogram	for the net	riad 2013	2017
Capacity Dunuing	Trogram	tor the per	100 2013 - 1	4017

	Beneficiaries			
Activity	Countries / Territories	Responsible	Period	Obs.
MSI Course (3 days)	For identified coastal	SAIHC CB		
	states	Coordinator		
Basic ENC and ENC	For identified coastal	SAIHC CB		IMO to organize -
Production Course	states	Coordinator		2 <sup>nd</sup> Semester
(10 days)				2013
Law of the Sea	For identified coastal	SAIHC CB		The CBSC did no
Workshop (5 days)	states	Coordinator		accept this
				submission at its
				meeting in
				Singapore June
				2012
MSDI and Database	For identified coastal	SAIHC CB		The CBSC did not
Management (5	states	Coordinator		accept this
days)				submission at its
• /				meeting in
				Singapore June
				2012
Chart Production (on	For Portuguese	SAIHC CB		Training venue =
the job training) 10	speakers only	Coordinator		Mozambique
days				Training provider
				= Brazil
				The CBSC
				accepted this
				submission at its
				meeting in
				Singapore June
				2012 with one
				amendment – for
				INAHINA staff
				only
Hydrographic Survey	-	SAIHC CB		Training venue =
(on the job training)	speakers only	Coordinator		Mozambique
10 days				Training provider
				= Brazil
				The CBSC did not
				accept this
				submission at its
				meeting in
				Singapore June
				2012

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Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical and Advisory Visits	Repeat visits to selected coastal states	IHO and SAIHC		
Basic ENC and ENC Production Course (10 days)	For identified coastal states	SAIHC CB Coordinator		Amended to a Basic Hydrographic Survey Course (10 days) on the advice of the SAIHC Chair
Tides and Water Level Workshop (5 days)	For identified coastal states	SAIHC CB Coordinator		Added on the suggestion of the SAIHC Chair
'On the job' survey training	For most coastal states	SAIHC CB Coordinator		Suggested by SAIHC Chair On an opportunity basis – no submission required

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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		Deferred to 2016 as a similar course will run in 2014
Law of the Sea Workshop (5 days)	For identified coastal states	SAIHC CB Coordinator		Added on the advice of SAIHC Chair

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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 (10 days)	states	Coordinator		

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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		



# **PROJECT SUBMISSION MODEL**

**Enclosure 2** 

<b>IDENTIFICATION</b>	Project Number :
Project Name:	Phase 1 Skills Training Course
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)
Date:	2015
Institution executing the	UKHO Training 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	Phase 1 Skills have been identified to be lacking in the			
	region			
Justification of the project	Regional requirement			

Countries involved	Angola, Kenya, Madagascar, Malawi, Mauritius,
	Mozambique, Namibia, Seychelles, Tanzania,
	Comoros, RSA
Exposition of the problem	Majority of countries in the region have limited
	MSI capability although personnel and structures
	are available. This course builds on the 3-day
	MSI course
General objective	The aim is to provide delegates with the skills
_	and knowledge to assess and promulgate
	navigationally significant information to the
	wider maritime community
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
benefits	SOLAS

Schedule of activities	5-day course
Past and/or current related	MSI courses delivered in Mozambique in 2007
projects supported by CBSC or	and Namibia in 2010
other sources	Phase 1 Skills course delivered in South Africa
	2012

# **RESOURCES**

Contribution by		
countries		
involved		
Contribution	Lecturer provided by UKHO free of charge except trav	vel &
by other	subsistence	
parties		
Contribution	Yes	
expected from		
CBCFund		
Total Cost	€ 19,952	
(euros)		
Breakdown of	Per diems (WHO rate x 50%) for 10 trainees & 1 Trainer	€7,612
costs	10 Economy flights (trainees) &	
	1 Business Class flight(trainer)	€ 10,595
	Taxi transfers for the above	€ 662
	Venue Fees	€ 1,082
		€ 19,95

From CBC	€ 19,952
Fund (item	
and amount)	

## PROJECT SUMMARY

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	2015	Angola, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Comoros, RSA	Priority 1	Phase 1 Skills Course	The aim is to provide delegates with the skills and knowledge to assess and promulgate navigationally significant information to the wider maritime community	To establish a core group of trained persons to deal with MSI	Fund Travel & subsistence for up to 10 students, together with one instructor from the UKHO (no fee for trainers time)	€19,952		Jeff Bryant (SAIHC CB Coordinator)

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Chairman Southern Africa & Islands Hydrographic Commission (SAIHC)



# **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 2015
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

# **RESOURCES**

Contribution by	Nil									
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	of the internation	ional flights for the trainers							
			<u> </u>							
	Hosting nation (yet to be de	ecided) to cove	er the cost of the training							
	materials (mostly copying)		C							
Contribution	14,763.67 Euros									
expected from										
CBCFund										
Total Cost	14,763.67 Euros									
(euros)										
Breakdown of	Flights € 8,691.83									
costs	Accommodation € 3,519.41									
	Meals	€ 516.93								
	Airport Transfers	€ 746.51								
	C nferencing Costs	€ 1,288.98								
	Totals	€ 14,763.67								

From CBC	14,763.67 Euros
Fund (item	
and amount)	

## PROJECT SUMMARY

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	2015	SAIHC	Priority 2	Technical	To teach	Increased	Fund Travel &	€14,764		Jeff Bryant
		Member		aspects of	participants	understanding of	subsistence for up			(SAIHC CB
		States		Maritime	the basic	the importance of	to 10 students,			Coordinator)
				boundaries,	technical	technical aspects in	together with			
				and	principles	the delimitation	accommodation			
				baselines (5	applicable	process, the legal	only for x2 UKHO			
				days)	to maritime	principles behind	trainers			
					boundary	boundary	(UKHO will cover			
					delimitation	delimitation, and to	the costs of			
					•	give students the	international flights			
						ability to play their	and trainer fees)			
						role in a boundary				
						team alongside				
						lawyers, politicians				
						and other experts.				

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Chairman Southern Africa & Islands Hydrographic Commission (SAIHC)