Tel: +27 21 7872412
Fax: +27 21 7872233
Email: hydrosan@iafrica.com

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

03 February 2017

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

SAIHC Letter No. 1/2017

Mr Thomas Dehling Thomas.dehling@bsh.de
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 (August 2016, Cape Town, South Africa), 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.

According to the referred procedures, I submit to the IHO CBSC **two** projects to be carried out during 2018, 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

Chairman Southern Africa & Islands Hydrographic Commission (SAIHC)

Copy:

IHB Att. Capt Alberto Costa Neves a.neves@ihb.mc

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 2018-2020

1. INTRODUCTION

1.1. Rationale

The Southern Africa & Islands (SAIHC) region contains three of the world's 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 world's 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 2018 to 2020, 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 **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 31st of each year details of all planned projects. The projects must be written in the standards established by the IHO CBSC (see Annex **B**).

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
	Technical and Advisory Visits		
0.1	High-level visit to governmental authorities	To raise government awareness of their SOLAS treaty obligations	Related Ministries and Heads of

Phase	Activity	Project Objective	Target Audience
			National Agencies, particularly governmental decision makers
0.2	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
0.3	Technical Implementation Visit	To audit the state of recommendations made as a result of previous technical visits	Maritime Sector National Agencies. Stakeholders and decision makers
0.4	Seminar on Raising Awareness of Hydrography		Maritime Sector National Agencies. Stakeholders and decision makers
	Technical Workshops, Seminars, Short Courses		
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
1.3	MSI Workshop (3 days)	To reinforce the learning at 1.1 above	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	Hydrographic Practioners

Phase	Activity	Project Objective	Target Audience
		for hydrographic surveying and mapping activities	
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
4.1	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
4.2	Tsunami inundation mapping workshop (5 days)	To improve the modelling and presentation of regional tsunami inundation maps	Maritime Sector and emergency planning
4.3	Foundation Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (3 weeks)	To provide participants with the knowledge of cartographic basics covering the underlying details of the nautical chart.	Cartographic Practioners
4.4	Compilation Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (5 weeks)	A highly practical module where the student will compile into a database all the relevant nautical chart content in compliance with IHO S-57 using CARIS S-57 Composer software.	Cartographic Practioners
4.5	Product Construction Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (2 weeks)	This module covers the production of an ENC base cell including ENC validation and exchange set creation using CARIS S-57 Composer together with the production of a Paper Chart using CARIS Paper Chart Composer.	Cartographic Practioners
4.6	Data Assessment Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (3 weeks)	This module focuses on decision making and processing of new information using software and traditional checking processes.	Cartographic Practioners
4.7	Maintenance Module of the Marine Cartography & Data Assessment (MCDA) CAT B Course (2 weeks)	Another highly practical module which features Notice to Mariner updating of digital and paper products together with New Edition maintenance of the ENC and Paper Chart.	Cartographic Practioners
	Long Courses and Programmes		
HA	Category “A” Hydrographic Programme	A recognized CAT A level Programme in accordance with IHO Publication S-5 – *Standards of*	Hydrographic Managers

Phase	Activity	Project Objective	Target Audience
		Competence for Hydrographic Surveyors	
HB	Category “B” Hydrographic Programme	A recognized CAT B level Programme in accordance with IHO Publication S-5 – *Standards of Competence for Hydrographic Surveyors*	Hydrographic Practioners
CA	Category “A” Nautical Cartography Programme	A recognized CAT A level Programme in accordance with IHO Publication S-8 – *Standards of Competence for Nautical Cartographers*	Cartographic Managers
CB	Category “B” Nautical Cartography Programme	A recognized CAT A level Programme in accordance with IHO Publication S-8 – *Standards of Competence for Nautical Cartographers*	Cartographic Practioners
	On-the-job and onboard training		
OJ	On-the-job training		
OB	Onboard training		

3. Capacity Building Program

The program of capacity building activities for the period 2018 – 2020 is detailed in Annex **C**.

oooOOooo

SAIHC Counties/Territories Capacity Building Phase Stage

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

	Country / Territory	NHC or NHCC	CB Phase 1	CB Phase 2	CB Phase 3	Last TV
1	Angola	-1	1	1	4	2008
2	France	2	3	3	3	N/R
3	Kenya	2	2	2	4	2012
4	Madagascar	-1	1	1	4	2011
5	Malawi	-1	1	2	3	2011
6	Mauritius	-1	2	2	4	2012
7	Mozambique	-1	2	3	3	2012
8	Namibia	-1	1	1	4	2011
9	Norway	2	3	3	3	N/R
10	Portugal	2	3	3	3	N/R
11	Republic of South Africa	2	3	3	3	N/R
12	Seychelles	-1	1	1	4	2012
13	Tanzania	2	1	2	4	2012
14	United Kingdom	2	3	3	3	N/R
15	Comoros	-1	1	1	4	2011

KEY

1. The numerical grid below describes the status of the National Hydrographic Committee (NHC)/National Hydrographic Coordination Committee (NHCC):

Value	Assessment
-1	No information available
0	The country does not have a NHC/NHCC
1	The country is in the process of establishing a NHC/NHCC
2	The country has established a NHC/NHCC

2. The numerical grid below applies to the Phases:

Value	Assessment
-1	No information available
0	The country is unaware of its national obligations
1	The county is aware of its national obligations but does not have the means to do it
2	The country has the ability to fulfil national obligations
3	The country fulfils its national obligations through a third party
4	The country fulfils its national obligations in a sustainable manner

Note: the assessment represented by 3 is an alternative to 4 as explained in the IHO's Capacity Building Strategy

3. Those coastal states with a mature hydrographic service and consequently don't require a technical visit are marked as N/R (not required)

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	

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

Capacity Building Program for the period 2018 – 2020

With two thirds of the SAIHC membership only qualifying for Phase 1 activities (because Phase 2 and 3 activities are designated IHO members only) the SAIHC CB Coordinator will endeavor to identify opportunities for the higher level training and workshops in adjoining regions.

2018

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Seminar on Raising Awareness of Hydrography	SAIHC Associate and Non Members	SAIHC CB Coordinator		
MSDI and Database Management (5 days)	For identified coastal states	SAIHC CB Coordinator		
Technical Implementation Visits	For identified coastal states	SAIHC CB Coordinator		

2019

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical Implementation Visits	For identified coastal states	SAIHC CB Coordinator		
MSI Course (3 days)	For identified coastal states	SAIHC CB Coordinator		
MBES Processing (5 days)	For identified coastal states	SAIHC CB Coordinator		

2020

Activity	Beneficiaries Countries / Territories	Responsible	Period	Obs.
Technical Implementation Visits	For identified coastal states	SAIHC CB Coordinator		
Tides and Water Level Workshop (5 days)	For identified coastal states	SAIHC CB Coordinator		

Enclosure 2

PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	Seminar on Raising Awareness of Hydrography (for SAIHC Associate and Non Members)
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)
Date:	2018
Institution executing the project:	SAIHC/UKHO
Name of responsible:	Jeff Bryant, SAIHC CB Coordinator
Address:	UKHO, Taunton, Somerset TA1 2DN
Telephone:	+44 1823 483821
Fax:	N/A
e-mail:	jeff.bryant@ukho.gov.uk

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

Background information	An awareness of hydrography is missing in many of the Southern Africa and Islands coastal states. This is evidenced by the lack of engagement with the RHC where few, if any, of the Associate member states attend meetings unless they are sponsored.
Justification of the project	It is suggested that a fully-funded seminar or workshop on hydrographic awareness to precede the next meeting of the SAIHC would assist in the crucial task of raising awareness of the subject. It would provide a platform to get greater involvement from the SAIHC Associate Members.

Countries involved	Angola, Comoros, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles and Tanzania
Exposition of the problem	The benefits of good hydrography to support all manner of maritime activity is not well understood at the higher levels of Government in many SIDS in the SAIHC region. This manifests itself in the poor attendance at the Regional Hydrographic Commission (SAIHC) meetings where such benefits are promoted. The target audience for an awareness raising seminar would be Permanent Secretary (or equivalent) level from a relevant national Ministry, who would then also attend SAIHC15.
General objective	To ensure that countries in the SAIHC region are made

	aware that the provision of hydrographic services is an international obligation under treaty law affecting all Member States (MS) of the IMO and also provides significant national infrastructure and long-term economic benefits. The Seminar is configured to assist countries on how they take the necessary steps to meet their obligation noting that most SAIHC countries are IMO MS but not IHO MS.
Specific objectives	• To understand the importance of nautical information • The basic activities of hydrographic offices: the IHO M-2 publication and how it relates to National Maritime Policies and Hydrographic Services • The organization of a National Hydrographic Office • The application of hydro-cartographic products and services • Working with a PCA (primary charting authority)
Outputs/Products	Participants will gain a better understanding of the regulatory framework which supports hydrography and how this can benefit a coastal state (Blue Economy etc)
Other deliverables	Participants will be encouraged to join the IHO
Achievements and awaited benefits	
Schedule of activities	1-day Seminar to proceed the 15th SAIHC meeting, venue to be decided

RESOURCES

Contribution by countries involved	Nil
Contribution by other parties	None
Contribution expected from CBCFund	Yes
Total Cost (euros)	**€22,500**
Breakdown of costs (subject to confirmation)	The contribution from the CBSC fund will cover travel and subsistence for one representative from each of the 10 countries involved. The representatives will be expected to stay on for the 15th SAIHC meeting and be active participants - at the very least delivering a National Report

From CBC Fund (item and amount)	**€22,500**

PROJECT SUBMISSION MODEL

IDENTIFICATION

Project Number :

Project Name:	Development of a Regional Marine Spatial Data Infrastructure (MSDI) Workshop
Submitting RHC/Country:	SAIHC (as part of the approved SAIHC CB Plan)
Date:	2018
Institution executing the project:	SAIHC/UKHO
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

Background information	The IHO definition of Hydrography supports "…marine activities including economic development, security and 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 Data Management "best practice"; a key enabler to MSDI, that would support development of a framework for Coastal and Marine Spatial Planning programs (MSP) and other initiatives at the enterprise, national and/ or regional levels. It introduces and informs how MSDI inter reacts as a component within the 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 as 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.
Justification of the project	Regional and / or National requirement

Countries involved	SAIHC Member and Associate States will be beneficiaries 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 conflicting 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 development and sustainability at the national and regional level. The workshop will enhance knowledge, understanding and confidence by providing delegates with practical insight as to what measures can be taken to develop and manage an MSDI framework. It will also provide an insight into what can be accomplished through development of robust and active programs of real time data monitoring; data capture and evaluation, data management, data sharing and exchange as well as improved access to information to underpin modeling and visualization of the underwater and coastal environment. The workshop will develop an appreciation of what is needed and how to measure and monitor progress over time against defined achievable 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 contribution to delivering successful national, regional, and potentially, global development in the marine space. It will do this through the provision of knowledge, understanding, tools and processes, solutions and case studies to better meet the challenges we all now face..
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

RESOURCES

Contribution by countries involved	Venue to be decided at the next SAIHC meeting
Contribution by other parties	2 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 MSDI subject areas including Governance, Data, ICT and Standards. This course will take into account current key global

	drivers for change, including the Rio+20 Conference outcome resulting in a commitment to develop the Blue Economy, UN-GGIM with its commitment to make geospatial data (including marine/maritime) central to all decision making and the G8 Group of Nations Open Data Charter stimulating wider access and re-use of publically funded data.
Contribution expected from CBCFund	Yes
Total Cost (euros)	**€31,072**
Breakdown of costs (subject to confirmation)	

Trainees		**x 10**	**(1 local)**			
Flights		9	persons x		€ 463	€ 4,167
Hotel, all meals		9	persons x	6	nights	
	=	54	nights x		€ 307	€ 16,578
Transport		9	persons x		€ 46	€ 414
Trainers		**x 2**				
Fees		2	x		€ 2,200	€ 4,400
Flights		2	x		€ 550	€ 1,100
Hotel, all meals		2	persons x	6	nights	
	=	12	nights x		€ 307	€ 3,684
Transport		2	persons x		€ 46	€ 92
Venue materials & hire costs						
For the week						€ 637
					Total	**€ 31,072**

Please note that the figures above have been rounded up/down to the nearest Euro and were taken from a more detailed spreadsheet..

From CBC Fund (item and amount)	Training and education	**€31, 072**

PROJECT SUMMARY SHEET and SAIHC Prioritization 2017

Sponsor RHC	Year of Execution	Country/ Countries involved	Priority/ Status	Project Name (Reference)	Project Objective	Benefits	Assistance required	Cost (Euro)	Allocation and Priority (to be filled by CBC)	Contact Person
SAIHC	2018	Angola, Comoros, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles & Tanzania	Priority 1	**Seminar on Raising Awareness of Hydrography (for SAIHC Associate Members)**	To ensure that countries in the SAIHC region are made aware that the provision of hydrographic services is an international obligation under treaty law affecting all Member States (MS) of the IMO and also provides significant national infrastructure and long-term economic benefits. The Seminar is configured to assist countries on how they take the necessary steps to meet their obligation noting that most SAIHC countries are IMO MS but not IHO MS	Participants will gain a better understanding of the regulatory framework which supports hydrography and how this can benefit a coastal state (Blue Economy etc)	The contribution from the CBSC fund will cover travel and subsistence for one representative from each of the 10 countries involved. The representatives will be expected to stay on for the 15th SAIHC meeting and be active participants	**€22,500**		Jeff Bryant (SAIHC CB Coordinator)

SAIHC	2018	Angola, Comoros, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles & Tanzania	Priority 2	**Development of a Regional Marine Spatial Data Infrastructure (MSDI) Workshop**	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.	Increased and enhanced understanding of MSDI and its contribution to delivering successful national, regional, and potentially, global development in the marine space. It will do this through the provision of knowledge, understanding, tools and processes, solutions and case studies to better meet the challenges we all now face..	The contribution from the CBSC fund will cover travel and subsistence for one representative from each of the 10 countries involved together with travel & subsistence (and professional fees) for x2 instructors	**€31,072**		Jeff Bryant (SAIHC CB Coordinator)

Chairman Southern Africa & Islands Hydrographic Commission (SAIHC)