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|  | **INTERNATIONAL HYDROGRAPHIC ORGANIZATION**  **EASTERN ATLANTIC HYDROGRAPHIC COMMISSION (EAtHC)** | brazaoOHI |

**CAPACITY BUILDING PLAN FOR 2018-2020**

**1. INTRODUCTION**

**1.1. Rationale**

The Eastern Atlantic (EAtHC) region comprises 23 coastal States, including two island States. Six are IHO and EAtHC members, nine are EAtHC associated members and ten are observers. The African part of the region is especially concerned by capacity building issues. This report deals only with this sub-region.

A few coastal States have started to develop hydrographic organizations. They mainly consist in hydrographic cells under the main port authority. They may include well trained people, although in small numbers, and, in a few cases, have recent equipment. However, they are suited for limited surveys, and may be in a near future inadequate for important development of harbours planned in several areas, and for meeting the requirements induced by economic development and the increased concern for maritime safety in the sub-region. At last, too few coastal States have managed to set up an organization for collecting and disseminating marine safety information.

Since 2002 (Western African Action Team – cf. EAtHC8) a specific effort in capacity building has been undertaken. It has mainly included:

* + technical visits: seventeen coastal States have been visited since 2002, some of them twice;
  + awareness or technical workshops on maritime safety information (MSI), hydrography and charting;
  + category B and A training (separately funded).

Awareness has increased, including at the highest political level, as reflected in the 2007 Abuja declaration, in which the African ministers responsible for maritime transport,

*“Concerned by … the lack of … modern hydrographic surveys, up-to-date nautical charts and maritime safety information in a number of African countries … undertake to … promote and encourage appropriate structures and measures for the improvement of … hydrographic survey, nautical cartography and maritime safety information”.*

As a consequence, the 2050 Africa’s Integrated Maritime Strategy has included in 2012 in its framework for strategic action:

“*The African Union shall make an assertive call to concerned Member States to become members of the International Hydrographic Organization (IHO), World Meteorology Organisation (WMO) and UNESCO Intergovernmental Oceanography Commission (IOC) so as to advance maritime safety, efficiency and the protection and sustainable use of the marine environment. This will help create a global environment in which AU coastal Member States provide adequate and timely hydrographic data, products and services and ensure their widest possible use.*”

However, slow progress is noted in hydrographic capacity, including nautical information.

The work of the last conference of the EAtHC in (EAtHC13, Casablanca, 16-18/09/2014) showed continuing challenges:

* + increasing maritime co-activities in the African sub-region, making urgent to raise the awareness of high-level political decision-makers on the importance of hydrography for the governance of their maritime space;
  + the need to enhance the data available in the African sub-region, for the benefit of national planning or for other applications, such as marine disasters prevention;
  + concern for the setup of regional hydrographic course adapted to the needs of coastal States;
  + difficulty, in some cases, to put into practice the training received, due to the lack of equipment.

Discussion resulted in several ways forward:

* + interest to develop regional hydrographic courses, based on existing African maritime academies;
  + need to address several uses, to take into account increasing concern of coastal States for management of resources, marine disasters prevention, protection of the environment and maritime security;
  + involvement of the political level through the Maritime Organization of Western and Central Africa (MOWCA).

In 2015, a definition study for a long term capacity building project was initiated. It aims at designing the main development axes of a consolidated regional CB programme that will raise concrete proposals and eventually funding opportunities.

**1.2. Aims and objectives**

The aims 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;

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

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

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

e) to comply with the IHO resolutions and guidelines regarding hydrographic and nautical cartographic activities; and

f) to ensure that hydrographic data and information are available to support the sustainable use of marine resources.

**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;

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

4 - activities which go beyond Phase 3.

Item **2 (Activities)** below lists the activities to be supported and are linked to the Phases 0 to 3 listed above.

The current hydrographic capacity status of coastal States in the region is in **Annex A** and the assessment is made in accordance with the draft CB Procedure 11.

**1.4. Methodology and Procedures**

This Plan sets the goals for the period 2018 to 2020 and will be reviewed each year, and adjustments made as necessary. Each year the EAtHC will decide responsibilities for the programmed events of the subsequent year and will consider the plans and proposals from other RHCs to identify synergies that could benefit developing countries in the region.

The EAtHC Capacity Building Coordinator will send to the Chair, no later than 31 January of each year details of all planned projects. The projects to be supported by the IHO CB Fund must be written in accordance with the CB Procedures 1 and 4.

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 15 April of that year, otherwise, will take the appropriate action.

**2. ACTIVITIES**

**2.1. Assessment and Awareness**

| **Phase** | **Activity** | **Project Objective** | **Target Audience** |
| --- | --- | --- | --- |
| 0.1 | High-level visits  High level visit to governmental authorities | To raise government awareness of their SOLAS treaty obligations | Related Ministries and Heads of national agencies, particularly governmental decision makers |
| 0.2 | Technical visits  Technical assessment and advice visit | Provide advice to identify how coastal states meet their hydrographic and MSI responsibilities | Maritime sector, national agencies, stakeholders and decision makers |
| 0.3 | Technical implementation visits  A follow up visit to the types 0.1 and 0.2 listed above | To audit the state of recommendations made as a result  of previous technical visits and support further development | Maritime sector, national agencies, stakeholders and decision makers |
| 0.4 | Seminar on Raising Awareness of Hydrography | Seminars to promote and raise awareness on the importance of Hydrography as part of the national economic infrastructure and key element for social development. | Maritime sector, national agencies, stakeholders and decision makers |

**2.2. Short courses**

| **Phase** | **Activity** | **Project Objective** | **Target Audience** |
| --- | --- | --- | --- |
| 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)  Assessment and implementation of effective measures to establish MSI infrastructure. | To provide a core group with the skills and knowledge to assess and implement effective measures to establish MSI infrastructures, following formal MSI Courses. | MSI Practioners |
| 2.1 | Basic Hydrographic Survey Course (10 days) | To provide awareness of national hydrography, hydrographic surveying and nautical cartography, and skills to specify contract support. | 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 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 Practitioners |
| 2.4 | MSDI and Data Management (5 days) | To give participants an understanding of spatial data infrastructures (SDI) for the provision of basic geospatial data | 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 Practitioners |
| 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 Practitioners |
| 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 Practitioners |
| 3.2 | ENC Production and QA (5 days) | To train a group of professionals to verify and validate S-57 data | Cartographic Practitioners |
| 3.3 | MSDI and Data Assessment (5 days) | To give participants an understanding of spatial data infrastructures (SDI) for data assessment and cartographic production | Government Planners |
| 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 |

**2.3. Long courses**

Long courses at Category "A" and Category "B" levels for both Hydrographic Surveying and Nautical Cartography are provided by the IHO and by other agencies. Coastal States will be notified by the EAtHC CB Coordinator about opportunities. Developing countries in need of long courses are also indicated in the CB Programme as follows:

| **Id.** | **Activity** | **Countries in need** |
| --- | --- | --- |
| HA | Category "A" Hydrographic Programme | All EAtHC African Coastal States. Particular need to have access to multi-language courses. |
| HB | Category "B" Hydrographic Programme | All EAtHC African Coastal States. Particular need to have access to multi-language courses. |
| CA | Category "A" Nautical Cartography Programme | All EAtHC African Coastal States. Particular need to have access to multi-language courses. |
| CB | Category "B" Nautical Cartography Programme | All EAtHC African Coastal States. Particular need to have access to multi-language courses. |

**2.4. On-the-job and onboard trainings**

Opportunities for on-the-job and onboard trainings will be sought by the CB Coordinators in liaison with coastal States. States that have ships transiting in the region are invited to consider offering onboard training for developing countries in the region. Developing countries in need of on-the-job and onboard trainings are also indicated in the CB Programme as follows:

| **Id.** | **Activity** | **Countries in need** |
| --- | --- | --- |
| OJ | On-the-job training | All African EAtHC coastal States. |
| OB | Onboard training | All African EAtHC coastal States. |

**2.5. Other trainings**

Other training and development needs may be identified which cannot be matched to the courses listed. These needs can be identified in textual form under "Other" in the CB Programme (item 3).

**3. Capacity Building Program**

The program of capacity building activities for the period 2018 - 2020 is detailed in **Annex B**. The countries in need of training and education listed under items 2.3 and 2.4 are included in the programme.

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**Annex A to CB Plan**

**EAtHC Counties/Territories Capacity Building Phase Stage**

The assessment of the Capacity Building Phase Stage shall be organized in the accompanying MS Excel spreadsheet

Reference: draft CB Procedure 11

**Annex B to CB Plan**

**Capacity Building Program for the period 2018 – 2020**

The CB Programme for 2018 to 2020 shall be organized in the accompanying MS Excel spreadsheet