## CBSC22-05.1F

## **EAtHC** Report

Report to CBSC22

5 - 7 June 2024

Santa Cruz Island - Galapagos, Ecuador

# By Gabin Sogorb (Shom - France) EAtHC CB Coordinator



### Content

- ➤IHO funded CBSC activities: Technical Visits and Seminars since CBSC21 (2024)
- **EAtHC** Members activities:
  - Spain
  - Portugal
  - France
  - UK
  - Nigeria
- ➤ Other countries activities through IHO:
  - UK, Japan, Korea, USA
- **≻**Challenges



## IHO funded Activities completed since CBSC21 - 1/4 (TV)

• [CBWP2024 – A-02] : Technical Visit to DR Congo

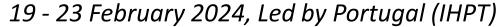
24 January -08 February 2024, Led by FR (Shom)

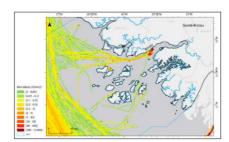






















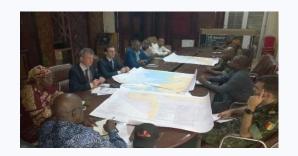
## IHO funded Activities completed since CBSC21- 2/4 (TV)

• [CBWP2024 – A- 01] : Technical Visit to Guinea (Conakry)

18 - 22 March 2024, Led by FR (Shom)









• [CBWP2024 - P- 05]: 20 Years of Capacity Building Actions in EAtHC Assessment and Prospect"

29 – 30 April 2024 Led by FR (Shom) with participation of : UK, Spain, Portugal, Morocco, Nigeria



## IHO funded Activities completed since CBSC21- 3/4 (Seminar)

• [CBWP2024 - P- 05]: 20 Years of Capacity Building Actions in EAtHC Assessment and Prospect"



29 – 30 April 2024 Led by FR (Shom)











UK, Spain, Portugal, Morocco, Nigeria (written testonomy





















## IHO funded Activities completed since CBSC21- 4/4 (EWH)

## Circular Letters 11/2024 EMPOWERING WOMEN IN HYDROGRAPHY PROJECT- Sponsored by the France

Course Dates: 08 April -26 April 2024

1 candidate from EAtHC was selected: RDC Ms.

### **Helene MIDIBEYO**







# IHO funded Activities planned for 2024 (not already done on May 2023)

CBWP2024 - A-05

**Technical Visit to Sao Tomé e Principe** 

PT (IHPT)

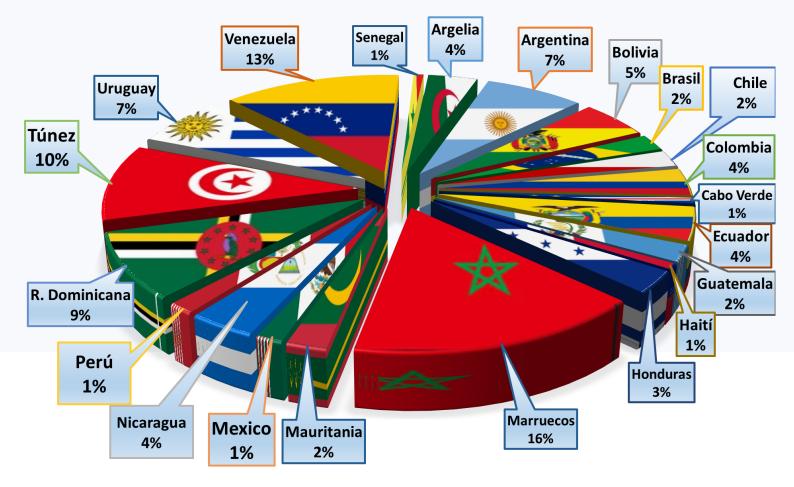


## EAtHC Members activities : Spain

- ➤ Spain- offers (IHM <a href="mailto:ihmesp@fn.mde.es">ihmesp@fn.mde.es</a>) courses (Spanish) to international students (only Military), through the Plan of International Cooperation for Military Teaching (Spanish Defense attaché), some foreign students are granted scholarships
- ➤ CURRENT OFFERS (Cadiz) :
  - Hydrography: CATegory A (ESHIDRO): 10 months
  - Hydrography: CATegory B (ESHIDRO): 10 months



## EAtHC Members activities : Spain



Distribution of international students (142) at spain Hydrographic school since 1969



## EAtHC Members activities: Portugal

- ➤ Portugal (IHPT: School of Hydrography and Oceanography ) offers the training of Navy officers and sergeants and civilian technicians necessary for the Hydrographic and Oceanographic activities,
  - CAT A Hydrography
  - CAT B Hydrography
     Scholarship within Portuguese
     Defense cooperation







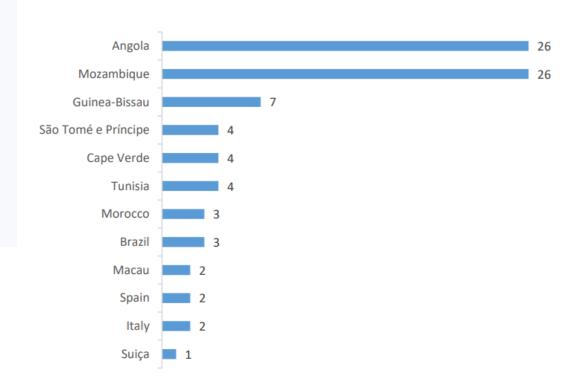


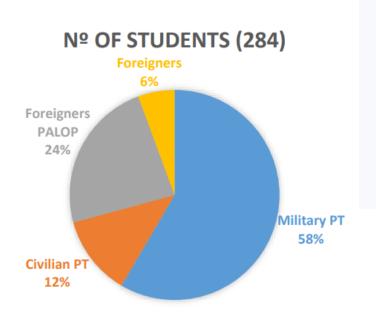
- ➤ MSI online training course to Angola (2023)
- ➤ Portugal organized in July 2022 the 1st Conference in Hydrography for the Community of Portuguese-speaking countries (Next in November 2024)
  - CPLP Member States: Angola, Brazil, Cabo Verde, Guiné-Bissau, Guiné Equatorial, Mocambique, Portugal, Sao Tomé e principe, Timors-Leste.
  - Guiné Equatorial is part of this community and during the meeting express the need for support.
- > IHPT mays organize on job training in foreign countries (To remember: if possible with the own equipment of the country)



## EAtHC Members activities: Portugal







## EAtHC Members activities: France

### **≻**Courses

- CAT A Hydrography : ENSTA Bretagne
- CAT B Hydrography: Shom school (2023- 2024: Mauritanie, Sénégal, République du Congo, Equateur)
- CAT B Cartography; Shom School (2023- 2024: Tunisie, Maroc, Mauritanie)
  Scholarship within French Defense cooperation
- Hydrography: AFHy (Association francophone d'hydrographie) (2024 : RDC, Colombie)
- Participation to steering committee of IHO E\_learning Project

### **≻On the job training**

- all annual survey ship in Africa are used to engage hydrographers of African countries visited
- Delegation from Benin on survey ship Laplace (April 2024)

















# EAtHC Members activities : France E-learning at Shom



- ➤ MSI module done (will be ported on IHO website, KHOA). Support to NAVAREA II
- ➤ In progress: CAT B hydrography modules (in support/complement of face to face)
- ➤In project : Tide module
- ➤ Technology, capacity:
  - Moodle
  - Recruitment of a « pedagogical engineer »

#### ➤ Public:

- Shom employees (new arrivals, continuing education, including those on ships)
- CAT B at Shom' school (curriculum mixed : face-to-face / remote)
- Training for Association Francophone d'Hydrographie (AFHy)
- Foreign hydrographers within the framework of the capacity building program capacities (Capacity Building Sub-Committee CBSC) of the IHO



## EAtHC Members activities: UK

- Survey training in The Gambia: In February 2023, the UKHO conducted two-weeks of in-country survey training to the Gambia Port Authority (GPA). The training included a combination of classroom-based theory and at sea practical training using their own Single Beam Echo sounder equipment. In addition to GPA: Gambia Maritime Authority, Gambia Navy, etc;
- Acquaint visit from Ghana navy hydrography student: In November 2023, the UKHO hosted a student from the Ghana Navy for a three-day Hydrographic Office acquaint visit. The visit included was designated to support the Ghana Navy with their exciting plans to establish their own Hydrographic Office by providing a range of presentations and demonstrations about how the UKHO operates. The UKHO continues to support the Ghana Navy with their aspirations
- ➤ Delivery of CAT B GEOMAC cartography course: Since EAtHC17, the UKHO has delivered its CAT B Geospatial Marine Analysis and Cartography (GEOMAC) course to three participants from the Nigerain Navy Hydrographic Office and one representative from the Ghana Martitime Authority

## IHO EAtHC Members : Nigeria

- ➤ NNHS: Nigeria Navy Hydrographic School : hydrographic school for surveyors.

  Programme unfortunately not accredited by IBSC (limit training offer in the subregion)
- ➤ Note: NNS Lana equipment and acquisition and processing of hydro-oceanographic data may be used for training



#### Lana

## Other countries: Korea, Japan, UK, USA

- Korea (KHOA) Hydrographic Survey CAT B (17 June 2022 01 November 2024)
  - Funding provided for 10 participants to attend this course
  - 1 candidate from EAtHC was selected: Nigeria Abdulrasheed JOKOMBA
- → Japan (Nippon Foundation) Cartography CAT B (UK) (15 July 13 December 2024)
  - Africa GeoMAC course: Nobody from EAtHC
- Korea (KHOA) Nautical Cartography CAT B in Busan (17 June 2022 01 November 2024)
  - Funding provided for 10 participants to attend this course
  - 1 candidate from EAtHC was selected: Nigeria Abdulrasheed JOKOMBA
- Korea (ROK) Master of science University of Southern Mississipi (USM USA) (11 August 2024 - 06 August 2025)
  - 1 candidate from EAtHC was selected: Nigeria Mr Onogateoghene IDOGE
- → Japan (Nippon Foundation) GEBCO TRAINING PROJECT University of New Hampshire (UNH USA) (August 2024 March 2025)
  - Waiting for selection if applications (14.04.24)



















## Challenges: membership, NHC, phases 1,2,3

- > 24 EAtHC Member States but only 10 IHO Members
- > NHC, when existing, not often met
- ➤ Digital : ENCs, S-100 ...
- ➤ Phase 1 (MSI): Non Western African coastal States fulfill independently its national obligations in a sustainable way. Importance of TVs. But ongoing progress (ex: new digital technology in Ghana)
- ➤ Phase 2 (Survey capacity): Only Morocco and Nigeria with developed capacities (offshore). Quite limited survey capacities (mainly harbor and non-national) incompliant with the development of important ports. Lack of funding at national levels
- ➤ Phase 3 (Charting capacity): Morocco and Nigeria have developed their own capacities and started the transition for chart production. Increase of geomatics capacities
  - Note: « land » cartography. Geomatics is developing very rapidly with the growing mastery of digital technology. It is possible that hydrography can also develop "from above": wanting to make charts (phase 3), the need to acquire data will be more evident and hydrography (phase 2) and data management (MSDI) will become essential

## Challenges:

- involvement of IHO MS in Africa
- inland
- To strengthen the involvement of other MS: currently mainly FR, PT, ES, UK. In a medium-longer term: MA, NG as local support for neighbouring countries.
- Strong needs in lagunas, rivers and lakes surveying and charting (Currently no foreign assistance unless Congo River with EU)

"The International Hydrographic Organization is an intergovernmental organization that works to ensure all the world's seas, oceans and <u>navigable waters</u> are surveyed and charted."



## Challenges: other stakeholders than hydrographers

- ➤ Include stakeholders other than "hydrographers" in TV: Not only safety of navigation
  - Maritime trade economic development (essential with autonomous ports, business, return on Investment)
  - **Risk prevention** (climate change) Protection and management of the marine environment Coastal zone management (essential to interest International funds)
  - Use of marine resources: minerals, oil & gas, renewable energy (essential to interest Ministries with financial capacities ... who often have a lot of survey data)
  - Maritime boundaries and policing (essential to interest government at highest level)
  - Marine science —physical oceanography (essential to prepare students to jobs related to the sea, essential to have academies include science and technologies related to sea and littoral in cursus, essential to have in the countries people able to deal with advanced sciences as hydrodynamics: tides, currents ...)
  - Marine spatial data infrastructure (essential to not lost a lot of data, to offer students data for their studies ...) Geomaticians
  - Inundation modelling (essential with climate change)
- ➤ Other stakeholders than hydrographers are interested in phase 3 and 2 not 1!. Finance (international) support of hydrography (to be express in NHC) will rely more on charts, DTMs and data than MSI;



## Challenges: inclusive approach of TVs

- Have an inclusive approach beyond training. Find solution to treat important weaknesses such as the human and financial resources, administrative roughness, Maintenance in Operational Condition of equipments (pooling are only solutions among others);
  - Human ressources
    - In quantity
    - Not only hydrographer or marine cartographer : manager, electronics,
    - the Youth is eager to innovate through science and digital technology (include universities and academies in TV);
  - Equipment
    - > Don't forget logistics for equipments (electronicians, computer scientists ...)
    - > Involve those who have naval means
  - Innovation: the very wide availability of satellite data dedicated to the ocean and free of charge must be encouraged to be exploited;
  - Budget (who has money !)
- ➤ Need more time before (preparation, address book), during (meet people, all stakeholders) and after (conclude with success story) TV
  - A challenge to have people (Team TV included) to invest their time in actions which are more "projects" than "visits"



## Challenges (TV): back on MSI and chart updating

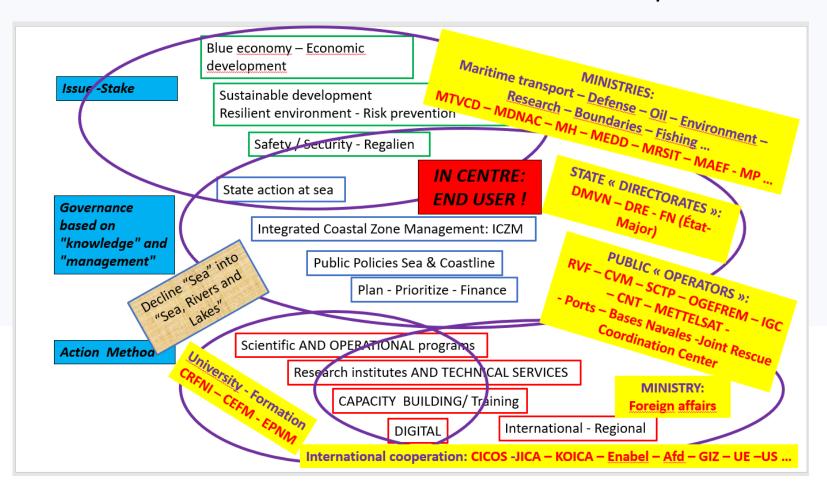
- TV must absolutely contact as many as people possible who can observe events and provide nautical information.
- ➤One of the most useful Annex of TV reports is the one related of contacts (useful too for IHO P5 Yearbook).
- NAVAREA and PCA must after the TV regularly maintain "individual" contacts (thinking about WhatsApp!). Occasional « face to face » very useful
- These "individual" contacts are essential; even if to consolidate the current MSI's execution, there is a need for an interministerial instruction dealing with the methods of the collection and the diffusion (urgent, fast, deferred) in accordance with the international regulations (IMO-IHO) and the national texts (when existing).

## Challenges: after TV

- It is becoming essential to go beyond simple technical visits to deal with the progress to be made in a sustainable manner:
  - It happens that previous TV recommendations have already often be done included MSI and NHC (High risk of repetition in TVs).
  - Country must extract targeted recommendations and follow their outcome. Reminders from the IHO visiting team (involved people are on other topics after TV, no follow-on visits?) are not very conclusive;
  - Begin by the easiest, least expensive and shortest things because first of all the country have already to start.
  - Medium- and long-term actions only to be managed in structured projects (Business model, ROI, included). The launch of major projects will require the support of international donors and a high level of quality governance (project management, budget sustainability, durability of results, etc.).

## Challenges (TV): to discuss at high level, governance

Interest other stakeholders than the ports

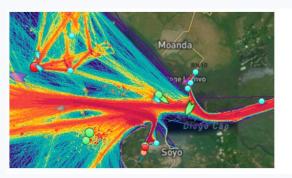


Extract from TV in Democratic Republic of Congo (January – February 2024)



## Actions required of CBSC22

- Please note this report
- Take any action considered appropriate







## **THANK YOU**



