CBSC21-05.1F

EAtHC Report

Report to CBSC21

Tokyo – Japan 7 - 9 June 2023

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EAtHC CB Coordinator

Content

- IHO CBSC activities: Technical Visits and Seminars in 2022 and 2023
- IHO EAtHC Members activities:
  - Spain
  - Portugal
  - France
  - Nigeria
- IHO EAtHC associated Members and other countries activities:
  - UK, Japan, Korea, USA
- Challenges

  - Note: This presentation is primarily based on exchanges among EAtHC members. There are certainly more capacity building initiatives (particularly on a bilateral basis) that are not mentioned such as:
    - Industry (training associated to equipments) (oil)
    - Training (CAT A and B), mentionned in National reports, in Germany, Italy, India, Bangladesh …
  - Sources: EAtHC reports , exchanges by Email and/or WhatsApp with: UK, Spain, Portugal, Nigeria …

Activities completed since CBSC20- 1/2 (Seminar)

Seminar ***"Working with NAVAREA II and your Primary Charting Authority"***

[CBWP 2022: action P-44] in September 2022 in Cabo Verde

With the assistance of :

Maroc · Mauritanie · Sénégal · Cap Vert

Gambie · Guinée Bissau · Guinée · Côte d'Ivoire

Port of Thema · Ghana · Togo · Nigeria · Cameroun

Gabon · Congo · Angola

Activities completed since CBSC20 - 2/2 (TV)

- [CBWP2022 – A-04] : **Technical Visit to Sierra Leone**

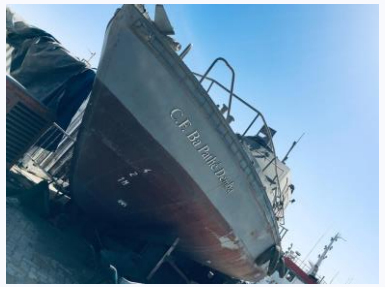
13 -16 February 2023, Led by UK (UKHO)



- [CBWP2022 – A-13] : **Technical Visit to Mauritania**

13 - 21 February 2023, Led by FR (Shom)





Activities planned for 2023 (not already done on April 2023)

CBWP2022 – A-06	**Technical Visit to Guinea Bissau**	PT (IHPT)
CBWP2023 – A-02	**Technical Visit to Sao Tomé e Principe**	PT (IHPT)
CBWP2022 – A-09 Shom funded	**Technical Visit to Morocco**	FR (Shom) (planned 15-19 Mai 2023)

IHO EAtHC Members : Spain

- Spain- offers (IHM - ihmesp@fn.mde.es) **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
  - Hydrographic course, **Category "A" (10 months) and Category "B" (10 months):** until 4 international students admitted each year
  - Hydrographic surveys basic course (8 weeks) until 2 international students admitted each year
  - Hydrography and Cartography middle course (15 weeks) until 2 international students admitted each year
  - Hydrographic equipment management basic course (8 weeks) until 2 international students admitted each year
  - Processing multibeam data and acquisition advanced course (15 weeks) until 2 international students admitted each year
  - IHM collaborate with other RHC in seminars , courses, workshops (Spanish)
- Spain- courses for Africans:
  - very few international students have come from Morocco to DCR.
  - BUT Spain have had however students from Morocco, Senegal, Cape Verde and Mauritania.

IHO EAtHC Members : Spain

On the job training: hydrographic survey in Mauritania
(November 2022)

Spanish hydrographers teaching Mauritanian ones

Spanish and Mauritanian hydrographers, who took part of the expedition

Distribution of international students at our Hydrographic school since 1969

IHO EAtHC Members : 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** (One student from Cape Verde)
- Portugal organized in July 2022 the 1st Conference in Hydrography for the Community of Portuguese-speaking countries
  - 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**)
- Miscellaneous: IHO has released an English /**Portuguese** version of the 6 th Edition of the special **publication S-44** 'IHO Standards for Hydrographic Surveys' (productive cooperation and input from Brazil (DHN) and Portugal (IHPT).

IHO EAtHC Members : France

➢Courses

- **CAT A Hydrography : ENSTA Bretagne**
- **CAT B Hydrography: Shom school (2021- 2022: Ivory Coast)**
- **CAT B Cartography ; Shom School**
- Hydrography: AFHy (Association francophone d'hydrographie)
- Specific training (Africa)
  - Morocco (marine delimitations)
  - Nigeria: 9 people from NNHO (survey ship NNS Lana)
- participation to E_learning Project Team (19 participants)

➢On the job training

- all annual survey ship in Africa are used to engage hydrographers of African countries visited
- Last action in Mauritania following the IHO TV of January 2023

IHO EAtHC Members : 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

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 : Nigeria asked *Lana*' shipyard (France OCEA) assistance in taking in hand of the NNS Lana equipment and the acquisition and processing of hydro-oceanographic data. (hydrographic engineer from Shom during one year)

Lana

IHO EAtHC Members : Nigeria

- Network IHO with African Development Bank Group
  - In Nigeria report at EAtHC17 (2022 – Cabo-Verde) (EAtHC17_2022_06.6A_EN_Presentation_NIGERIA.pdf) Nigeria wrote:
  - *" Nigerian Navy is working on an initiative to network IHO with African Development Bank Group to explore ways of developing hydrography in Africa"*
- It may be interesting to link this important initiative with the proposition that will be discussed at next IHO Assembly in Monaco: *PRO- 3.5 Establishment of a task force to explore the potential merits, structures,and options for alternate fund generation to support capacity building and other IHO initiatives* (https://iho.int/en/circular-letters-documents-0)

Other countries: Korea, Japan, UK, USA

- Korea (KHOA) – Hydrographic Survey CAT B (25 July 2022 – 09 December 202)
  - Cameroon (M. Cyrille Valery NDONO TOLO), -
  - Nigeria (M Ekemini Sunday WILLIAMSON)
- Japan (Nippon Foundation) – Cartography CAT B (UK)
  - Africa : August –December 2022 GeoMAC course includes students from Ghana and nigeria
- Korea (KHOA) – Nautical Cartography CAT B in Busan (June – November 2023)
  - Ghana (M. Samuel Ago MANTEY), -
  - Nigeria (Mme Mercy Modupe OGUNGBAMILA)
- Korea (ROK) – Master of science University of Southern Mississipi (USM - USA) (August 2023 – August 2024) - Ghana (M. Samuel Ago MANTEY), -
  - Nigeria (Mr Onogateoghene Eduvie Idoge) second reserve
- Japan (Nippon Foundation) – GEBCO TRAINING PROJECT – University of New Hampshire (UNH – USA) (August 2023 – August 2024)

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

- 26 EAtHC Member States but only 8 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 harbour 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 (but not MSDI)
    - 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 and rivers 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 **navigable waters** 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

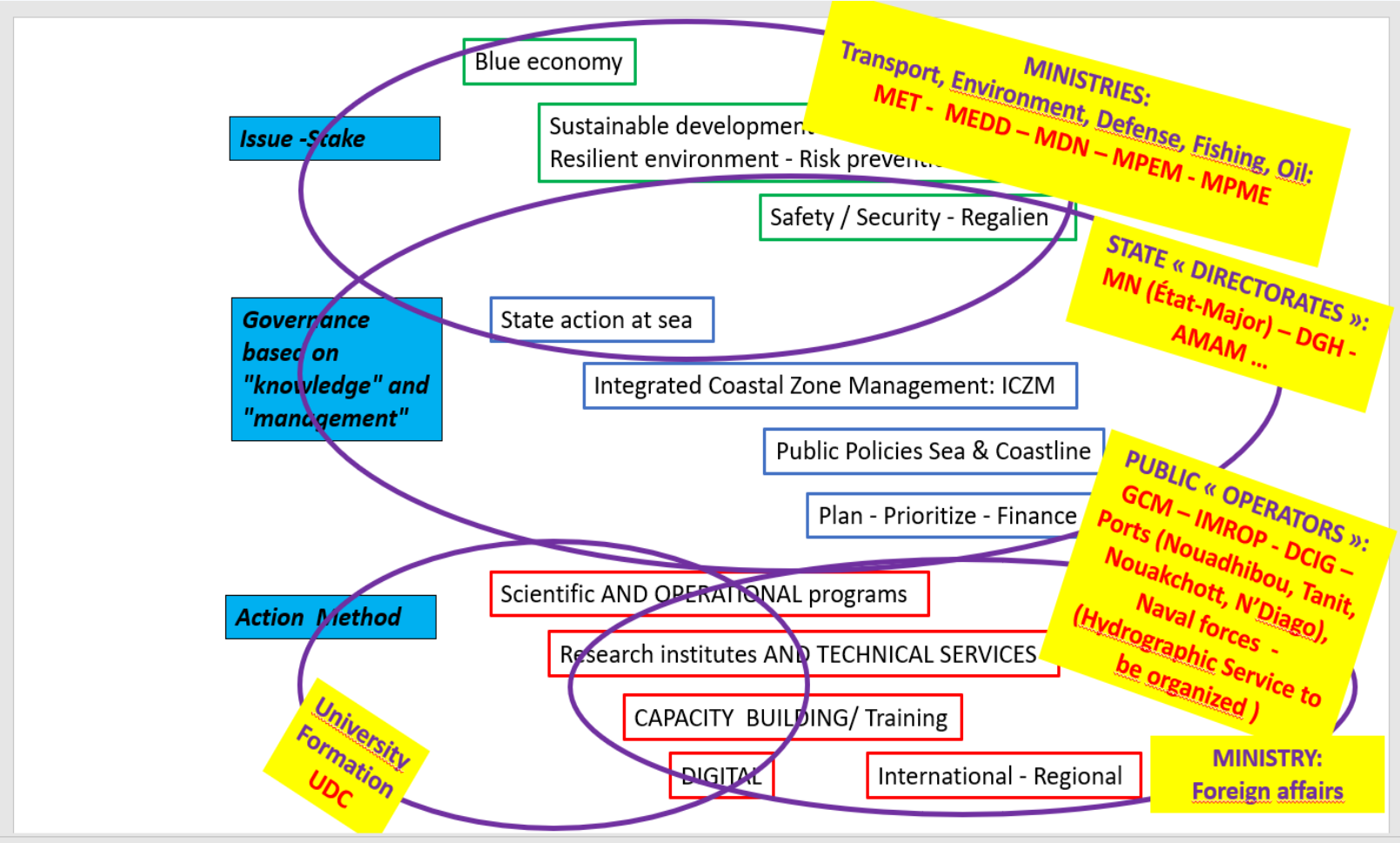
- TV must absolutely contact as many as people possible who can observe events and provide nautical information.
- One of the most useful Annex of TV reports is the one related of contacts (useful too for IHO P5 Yearbook).
- NAVAREA and PCA must after the TV regularly maintain “individual” contacts (thinking 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

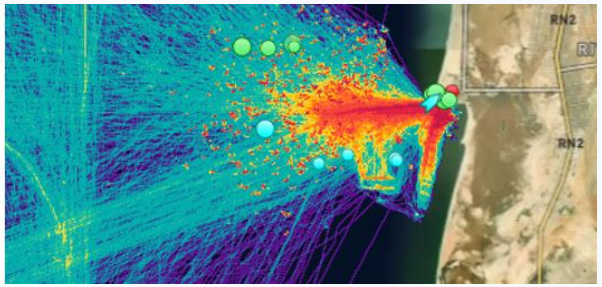
Interest other stakeholders than the ports



Extract from TV in Mauritania (January 2023)

Actions required of CBSC21

- Please note this report
- Take any action considered appropriate



THANK YOU