



# Seminar of the 18<sup>th</sup> EAtHC Conference *Séminaire de la 18<sup>ème</sup> Conférence de la CHAtO*

**“20 Years of Capacity Building Actions in EAtHC Assessment and Prospect”**  
**« 20 ans de renforcement des capacités dans la région CHAtO : Bilan et Perspectives »**

## **Organization of the seminar** ***Organisation du séminaire***

Presented by EAtHC CB Coordinator  
*Présenté par le coordinateur de développement de capacité de la CHAtO*

## **Agenda Items 2.5**

EAtHC18/Seminar, Casablanca, 29 – 30 April 2024



IHO

**ORGANISATION DU DÉVELOPPEMENT DE CAPACITÉS À L'OHI : STRATÉGIE, PROGRAMME**  
**ORGANIZATION OF CAPACITY DEVELOPMENT AT THE IHO: STRATEGY, PROGRAM**

## *Renforcement des capacités et coopération technique*

*Le renforcement des capacités est défini comme le processus par lequel l'OHI évalue et contribue au développement durable des États membres et d'autres États, afin de répondre aux objectifs de l'OHI et aux obligations liées au chapitre V de la Convention SOLAS, à la CNUDM et aux autres instruments internationaux. Le renforcement des capacités est un objectif stratégique de l'OHI.*

## **Capacity building and technical cooperation**

Capacity Building is defined as the process by which the IHO assesses and assists in sustainable development of the Member States and other states, to meet the objectives of the IHO and the obligations related to SOLAS Chapter V, UNCLOS and other international instruments. Capacity Building is a strategic objective of the IHO.

## Enjeux

*Économie bleue – Développement économique*

*Aménagement durable  
Environnement résilient - Prévention risques*

*Sécurité/Sûreté - Régalien*

***Gouvernance fondée sur la « connaissance » et le « management »***

*Action de l'État en Mer: AEM*

*Gestion Intégrée des Zones Côtières: GIZC*

*Politiques Publiques Mer & Littoral: PPML*

*Planifier – Prioriser - Financer*

## Action Méthode

*Programmes scientifiques ET OPÉRATIONNELS*

*Instituts recherche ET SERVICES TECHNIQUES*

*Développement CAPACITÉS /Formations*

**NUMÉRIQUE**

**International – Régional**

## Challenges

Blue economy – Economic development

Sustainable development  
Resilient environment - Risk prevention

Safety / Security - Regalien

***Governance based on "knowledge" and "management"***

State action at sea

Integrated Coastal Zone Management: ICZM

Public Policies Sea & Coastline

Plan - Prioritize - Finance

## Action Method

Scientific AND OPERATIONAL programs

Research institutes AND TECHNICAL SERVICES

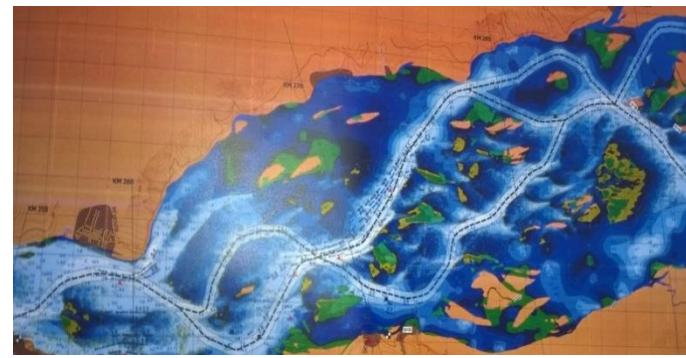
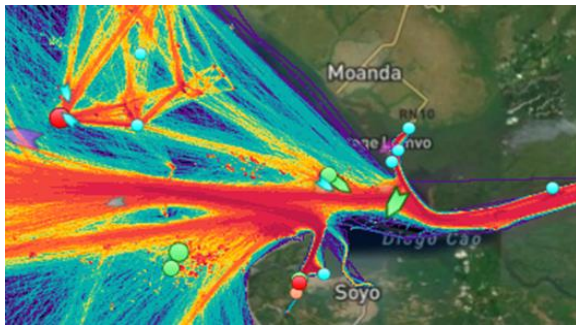
CAPACITY BUILDING/ Training

**DIGITAL**

**International – Regional**

# Enjeux économiques, de sécurité, d'environnement: mer, côtier, fluvial

## Economic, security and environmental challenges : sea, coastal, river





**Des capacités matérielles pour faire face à ces enjeux: navires, vedettes, équipements hydrographiques, océanographiques, infrastructures cartographiques**

**Material capabilities to face these challenges: ships, launches, hydrographic and oceanographic equipment, cartographic infrastructures**



Trimble GPS Antenna



Dual Frequency Transducer



CEESCOPE 200 INTEGRATED TRIMBLE GNSS



Getac Laptop w/Hydromagic Software



**Et in fine rien sans des capacités humaines : des hommes et des femmes formés à tous les métiers**

**And ultimately nothing without human capabilities: men and women trained in all professions**



**Deux métiers spécifiques : hydrographe et cartographe marin à former dans des écoles homologuées**

**Two specific professions: hydrographer and marine cartographer to be trained in recognized schools**



**Un manque cruel d'écoles spécialisées en Afrique**

**A severe lack of specialized schools in Africa**



**NIGERIAN NAVY  
HYDROGRAPHIC SCHOOL**





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# QUE FAIRE ? WHAT TO DO ?

International  
Hydrographic  
Organization

On ne part pas de rien. En termes de développement de capacités, il existe déjà au niveau de l'OHI:

- Une stratégie
- Un programme annuel

We don't start from nothing. In terms of capacity building, there already exists at the IHO level:

- A strategy
- An annual program

## References

<https://iho.int/en/miscellaneous-2> (Strategy)

<https://iho.int/en/capacity-building-and-technical-cooperation> (Capacity Building Work programme)

## PHASES OF DEVELOPMENT OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING CAPABILITY

Phases of Development	National Activity
<b>Phase 0</b> Unaware of its national obligations	<ul style="list-style-type: none"> <li>• The country does not have a National Authority (NA) and/or National Hydrographic Coordinating Committee (NHCC)</li> <li>• Need to raise maritime awareness</li> <li>• Need to create infrastructure to collect and circulate maritime safety information</li> <li>• Need to strengthen links with NAVAREA Coordinator to enable the promulgation of safety information</li> <li>• Form National Authority (NA) and/or National Hydrographic Coordinating Committee (NHCC)</li> </ul>
<b>Phase 1</b> Aware of its national obligations but need to improve their processes. Collection and circulation of nautical information, necessary to maintain existing charts and publications up to date	<ul style="list-style-type: none"> <li>• Create/improve current infrastructure to collect and circulate information</li> <li>• Strengthen links with charting authority to enable updating of charts and publications</li> <li>• Minimal training needed</li> <li>• Strengthen links with NAVAREA Coordinator to enable the promulgation of safety information</li> <li>• Keep a National Structure to prevention or mitigation of consequences of marine disasters or climate change</li> </ul>
<b>Phase 2</b> Creation of a surveying capability to conduct: <ul style="list-style-type: none"> <li>• Coastal projects</li> <li>• Offshore Projects</li> </ul>	<ul style="list-style-type: none"> <li>• Establish capacity to enable surveys of ports and their approaches</li> <li>• Maintain adequate aids to navigation</li> <li>• Build capacity to enable surveys in support of coastal and offshore areas</li> <li>• Build capacity to set up hydrographic databases to support the work of the NA/NHCC</li> <li>• Provide basic geospatial data via MSDI</li> <li>• Requires funding for training, advising &amp; equipment or contract survey</li> </ul>
<b>Phase 3</b> Produce paper charts, ENC and publications independently	<ul style="list-style-type: none"> <li>• The need shall be thoroughly assessed. Requires investment for production, distribution and updating</li> <li>• Alternatively, bi-lateral agreements for charting can provide easier solutions in production and distribution (of ENC through RENCs) and rewards.</li> <li>• Further development of MSDI</li> </ul>

INTERNATIONAL HYDROGRAPHIC ORGANIZATION  
Adopted 2024 CBWP V2

Updated: 5/2/2024

IHO WP Element: Capacity Building Assessment - Technical and High-Level Visits						
No.	Events	Responsible	Budget	Status	Resources	
A-01	Technical visit to Guinea	EAIHC	6,000 €	Led by Date	IHO	
A-02	Technical Visit to DRC	EAIHC	10,000 €	Led by Date	IHO-ROK	
A-03	Technical Visit to Uganda	SAIHC	4,000 €	Led by Date	IHO-ROK	
A-04	High Level Technical Visit to Colombia	MACHC	5,000 €	Led by Date	IHO-ROK	
A-05	Technical visit to S. Tomé e Príncipe (from 2023 A-02)	EAIHC	5,500 €	Led by Date	IHO	
A-06	High Level Technical Visit to Iraq (from 2023 A-04)	RSIHC	5,000 €	Led by Date	IHO	
A-07	Technical Visit to Costa Rica (from 2023 A-05)	MACHC	4,800 €	Led by Date	IHO	
A-08	Technical visit to Guinea-Bissau (from 2022 A-06, 2023 A-10)	EAIHC	5,000 €	Led by Date	IHO	
A-9	Technical Visit to Honduras (from 2021 A-03, 2022 A-11, 2023 A-11)	MACHC	4,200 €	Led by Date	IHO	
A-10	Technical Visit to Cambodia (from 2021 A-08, 2022 A-15, 2023 A-14)	EAIHC	5,720 €	Led by Date	IHO	
A-11	Technical Visit to Iran (former 2020 A-11, 2019 A-12, 2021 A-14, 2022 A-17, 2023 A-15)	RSIHC	3,000 €	Led by Date	IHO	
			-			58,220 €



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# QUE FAIRE AU NIVEAU DE LA CHATO? WHAT TO DO AT EATHC LEVEL ?

Table 1: Degree of engagement (X = Low, XX = Medium-low, XXX = Medium-high, XXXX = High)

	IHO	CBSC	RHC	Country
Awareness	XXX	XXXX	XX	X
Assessment	X	XXX	XXXX	XX
Analysis	XXXX	XXX	XX	X
Action	X	XX	XXX	XXXX

*Essayons déjà d'être force de proposition pour compléter les offres de formation existantes. Charge au coordinateur de développement de capacité pour la CHAtO d'en tenir compte pour :*

- préparer le programme régional triennal à venir*
- voire amender la stratégie de l'OHI du moins dans ses spécificités régionales*

Let us already try to be proactive in complementing existing training offers. It is up to the capacity development coordinator for CHAtO to take this into account to:

- prepare the upcoming three-year regional program
- or even amend the IHO strategy at least in its regional specificities





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**MÉTHODE: ORGANISATION DES 3 ATELIERS  
(EN ANGLAIS, FRANÇAIS ET PORTUGAIS)  
METHOD: ORGANIZATION OF 3 WORKSHOPS  
(ENGLISH, FRENCH, PORTUGUESE)**

**ATELIER A (29 April)**

*Exprimer les besoins des pays indépendamment des offres de développement de capacités existantes /*

*Express country needs independently of existing capacity development offers.*

**(30 April)**

*Offres actuelles de formation /*

*Current training offers in hydrography schools.*

**ATELIER B (30 April)**

*Identification des formations existantes pouvant être utilisées et celles devant être créées /  
Identification of existing training courses to be used and those to be implemented*



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# **ORGANISATION DES 3 ATELIERS : L'OBJECTIF**

## **ORGANIZATION OF 3 WORKSHOPS : THE OBJECTIVE**

International  
Hydrographic  
Organization

### **ATELIER A (29 April) : De quoi parle-t-on en matière de développement de capacités ?**

**Quoi:** *formation, matériel, conseil en organisation et coopération, financements*

**Pour formations:**

- **Sujets:** *information nautique, levés, cartographie,*
- **Sans oublier:** *environnement, gestion des risques, économie bleue*
- **Domaines:** *le côtier, le large, les ports, les lagunes, les fleuves*
- **Sujets connexes et transverses :** *gestion des données (bases, portails-Internet ...), géomatique, acquisitions et entretien du matériels (électronique, informatique...)*

### **WORKSHOP A (April 29): What are we talking about in terms of capacity building ?**

**What:** training, equipment, organizational and cooperation advice, financing

**For training:**

- **Subjects:** nautical information, surveys, cartography,
- **Without forgetting:** environment, risk management, blue economy
- **Domains:** coastal, offshore, ports, lagoons, rivers
- **Related and transversal subjects:** data management (databases, Internet portals, etc.), geomatics, acquisitions and maintenance of equipment (electronics, IT, etc.)



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# **ORGANISATION DES 3 ATELIERS : L'OBJECTIF**

## **ORGANIZATION OF 3 WORKSHOPS : THE OBJECTIVE**

International  
Hydrographic  
Organization

### **ATELIER A (29 April) : De quoi parle-t-on en matière de développement de capacités**

#### ***Pour formations (suite) :***

- ***Où: hors Afrique, Afrique (absence d'écoles homologuées)***
- ***Dans quelle langue ?***
- ***Comment ? (face to face – E-learning)***
- ***Quels niveaux de formation : opérateur, technicien supérieur (B), ingénieur (A), recherche scientifique***
- ***Quels métiers: hydrographes, cartographes, électroniciens, informaticiens, managers***
- ***... avec quel argent !***

### **WORKSHOP A (April 29): What are we talking about in terms of capacity building ?**

#### ***For training (following) :***

- **Where:** outside Africa, Africa (absence of approved schools)
- **In what language?**
- **How ?** (face to face – E-learning)
- **What levels of training:** operator, senior technician (B), engineer (A), scientific research
- **What professions:** hydrographers, cartographers, electronics engineers, computer scientists, managers
- **...with what money!**