







## KINGDOM OF MOROCCO

Report to MBSHC24

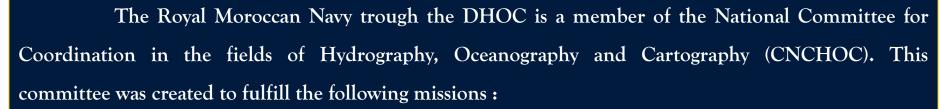
Constanta, Romania 2 - 4 July 2024





## Introduction HO structure in national maritime administration

The National Committee for Coordination in the fields of Hydrography, Oceanography and Cartography (NCCHOC)



- Contribute to the definition of a national policy in the fields of Hydrography, Oceanography and Marine Cartography;
- Approve all programs of development for Hydrography, Oceanography and Marine Cartography;
- Prepare an annual report including the recommendations in these fields.











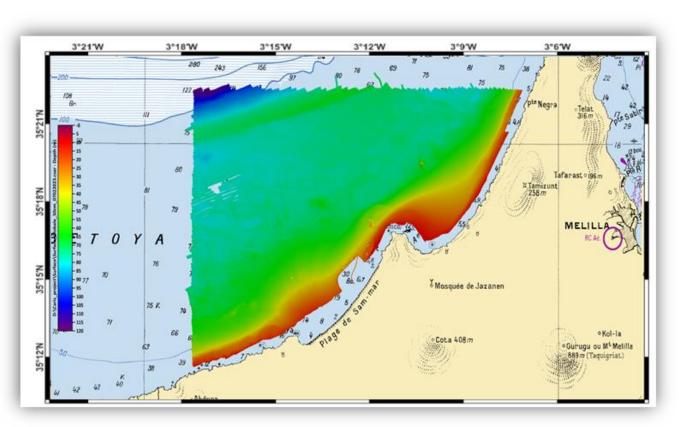








Hydrographic Survey in the Approaches of Nador West-Med (2023)

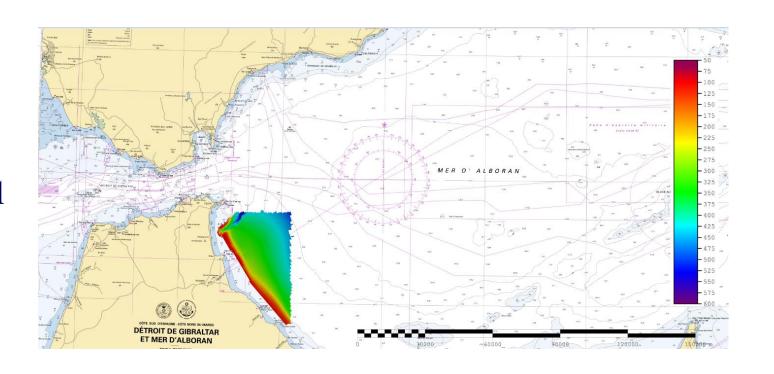








Hydrographic Survey in the Approaches of M'diq port (2024)

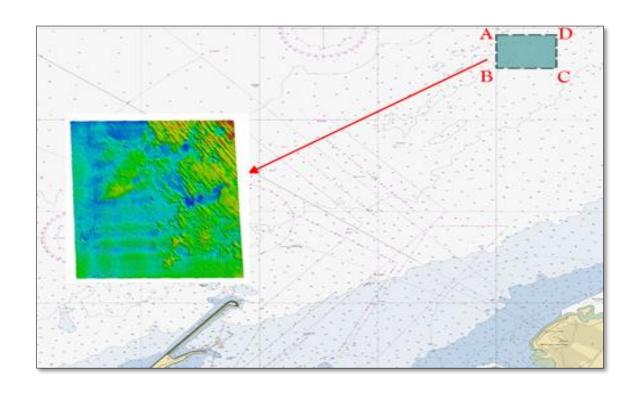








Creation of a bathymetric reference area (2022)



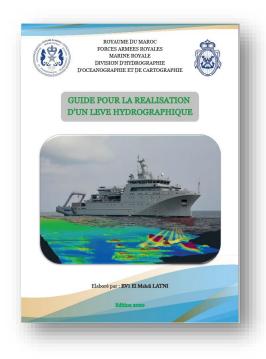






Publication of the Moroccan hydrographic standard (2023)









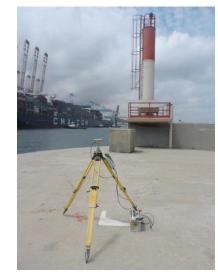


#### Key Achievements: Topography

- Nador West-Med (2023)
- Tanger-Med (2023)
- M'diq (2023)













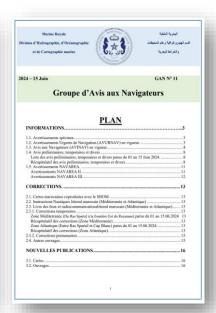


#### Key Achievements: Aids to Navigation

- Notices to Mariners (Every 15 days)
- Navigational warnings







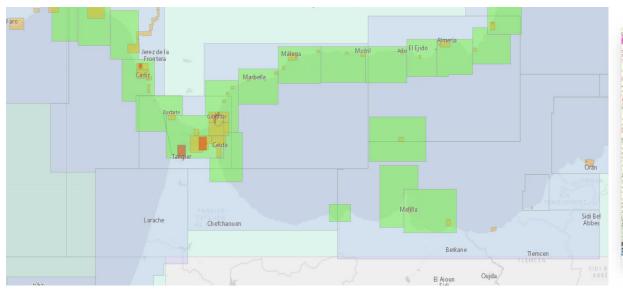


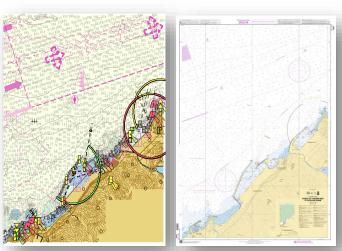


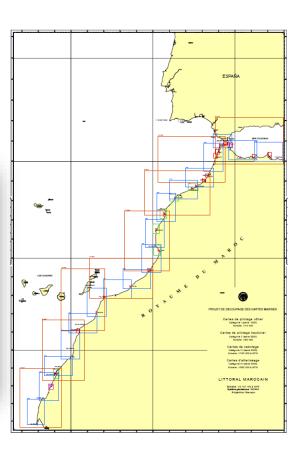


## Key Achievements: Nautical charts

- Publication of « Tanger Ville harbor's » chart (INT1969, 1/12 500))
- Publication of « Tanger-Med and Ksar Sghir harbor's » chart (2024) (INT1971, 1/12 500)









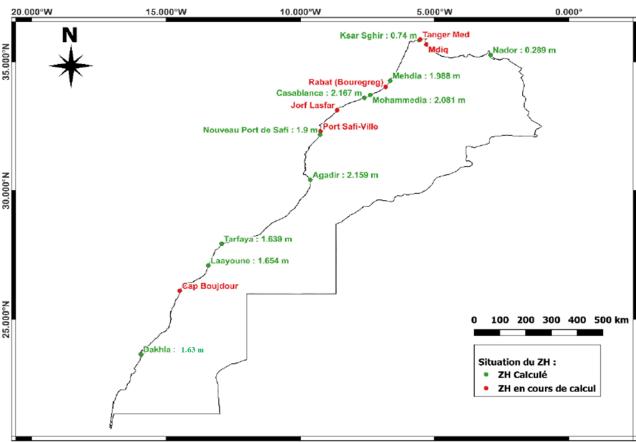




#### Key Achievements: Tide gauges Network

- Installation of <u>(05) Tide gauges</u>
  - (M'diq Tanger-Med)
- Determination of (04) Chart Datum 'CD'







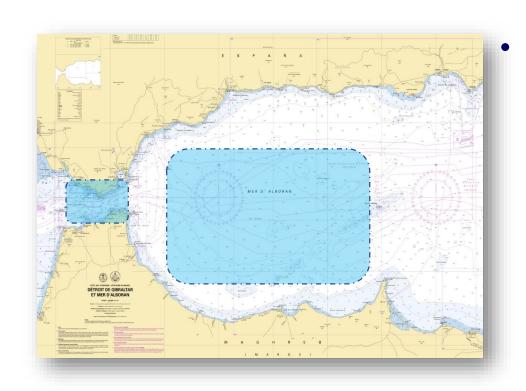




 Oceanographic survey in Alboran sea



Characterization of Western Alboran Gyre 'WAG'



Oceanographic survey in Gibraltar straight



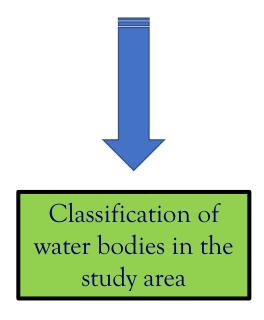
Classification of water bodies in the study area

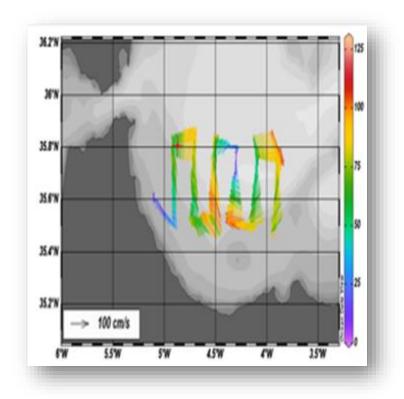






Oceanographic survey in M'diq





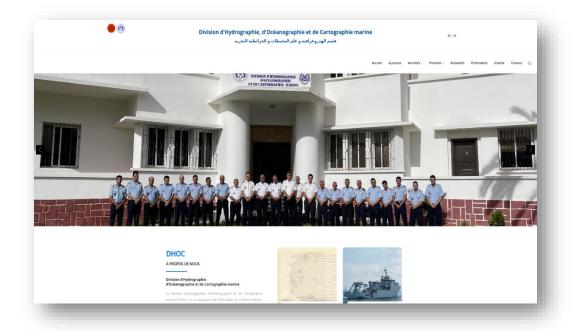






• On-line of DHOC web-site (Since Sept 2023)











- A National action Plan (<u>(04) actions</u>) approved by the IOC/UNESCO (<u>2022</u>)
- Setting-up of National Committee related to the UN Decade of Ocean Science (2023)



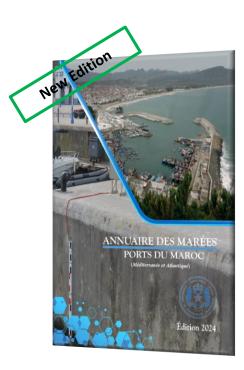




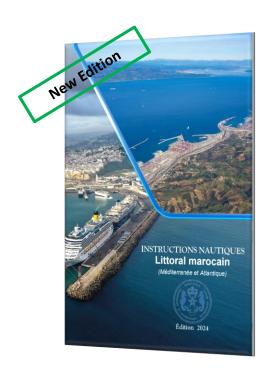




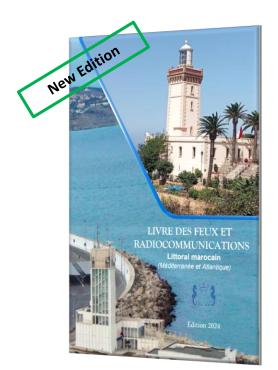
#### Key Achievements: Other publications



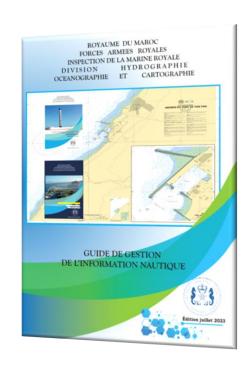
'Tide Tables of Moroccan Coasts - 2024'



'Sailing Directions Tide Tables of Moroccan Coasts - 2024'



'Lights & Radio-signals ide Tables of Moroccan Coasts - 2024'



'Management of Nautical Information'
Book

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#### MSDI implementation

#### 'MSDI' Implémentation Strategy

#### Knowledge

- -Participation of 'MSDI/WG' works
- -Organization of national workshops & seminars.

#### Etablishment

- -Elaboration
  Government Policies
- -Identification of actors and their roles
- -Identification of needs

#### Conception

- -Conception of functional and technical architecture (Hard & Soft)
- -Elaboration of procedures
- -Elaboration of execution Plan

#### Developpent

- -Acquisition of equipment and necessary softwares
- -Developpement of MSDI components
- -Preparation of data for migration

#### **Evaluation**

- -Evaluation of emerging technologies and improvements to MSDI architecture
- Monitoring and evaluation
- -Trainings

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## S-100 implementation

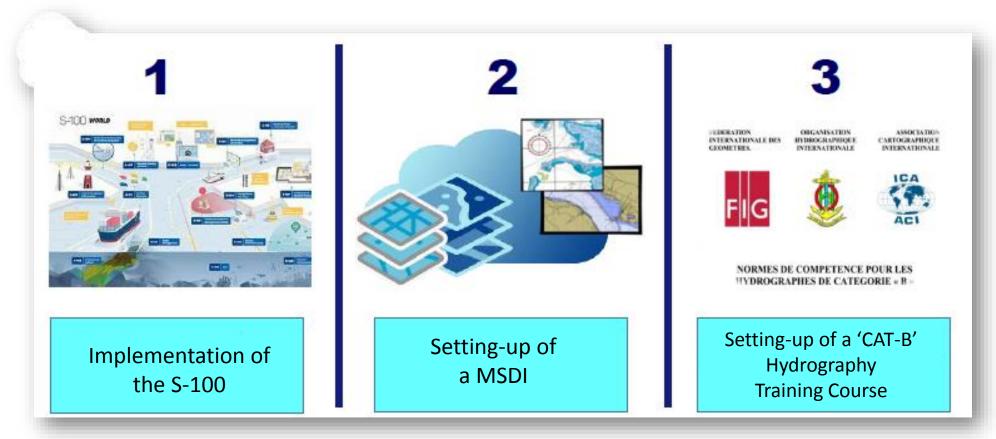
2027	2028	2029	2030	2031	2032	2033
S-101	S-102	S-124	S-104	S-128	S-122	S-127
			S-111	S-121	S-131	S-123
						S-129







## Main challenges









#### Other activities

- Organization by DHOC of a 'Training Day' related to best practices in hydrographic Surveys (2022)
- Participation in the meetings of National Committee for Coordination in the fields of Hydrography, Oceanography and Cartography (NCHOC)
- Seminar "Adaptation of Coastlines to climate change and protection of marine environment" ('5+5 Defence Initiative' Morocco October 2023)



'Hydrography Training Day' - 2022



'5+5 Defence Initiative' - 2023





#### **Lessons Learned**

\* Need for more capacity building activities in the region, mainly 'Personnel Training'

❖ Importance of bilateral cooperation between Hydrographic Services (DHOC - Shom - IIM - IHM - IHP - ...)







# Conclusion / Proposals /Actions required from MBSHC

Reinforce State Capacity by organizing Training Workshops (S100, MSDI...)

Organize cross-visits for expertise sharing between Hydrographic Services









# THANK YOU FOR YOUR ATTENTION

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