Hydrographic, Oceanographic and Cartographic Division



19th Meeting of Mediterranean and Black Seas Hydrographic

Batumi, Georgia

Commission

NATIONAL REPORT OF KINGDOM OF MOROCCO

This report states the major activities realized by the Hydrographic, Oceanographic and Cartographic Division (DHOC) since the 18th Meeting of Mediterranean and Black Seas Hydrographic Commission (MBSHC).

1. General:

The Hydrographic Service of the Royal Moroccan Navy was founded (under the name of HYDROSER) in 1986 with the cooperation of the United States Naval Oceanographic Service (NAVOCEANO) to conduct hydrographic surveys in the waters under Moroccan jurisdiction. In 2007 the Service became a Division of Hydrography, Oceanography and marine Cartography (DHOC).

In the framework of an administrative agreement signed between France (SHOM) and Morocco (Moroccan Royal Navy) in the field of hydrography, oceanography and marine cartography, the SHOM has brought to the royal navy assistance and advices that allowed him to create a national institution in hydrography, oceanography and marine cartography.

Therefore, 2014 represent a turning point since the creation of the National Hydrographic Service by a Royal Decision in October 20, that aims to make the Moroccan Royal Navy the guarantor of the hydrographic field and responsible of all activities related to hydrography, oceanography and cartography.

On 30th October, 2014 a Decree was signed in order to create a National Coordinating Committee in the fields of hydrography, oceanography and marine cartography, responsible for harmonizing the actions of all public services and any party involved in the said fields.

2. Surveys:

- <u>Coverage of new surveys:</u> None (All surveys were conducted in Moroccan Atlantic coast in the last two years).
- <u>Trajectography works</u>: None (All surveys were conducted in Moroccan Atlantic coast in the last two years).

- Technology and software:

> Software:

During 2014, the DHOC has ordered many types of software:

- 03 Qinsy's licenses;
- 01 Code for activation Add-on for Qinsy;
- 02 Fledermaus pro softwares;
- 01 flash with license for Hypack software;
- 01 license for Caris HIPS and SIPS;
- 02 licenses for Caris Base Editor;
- 04 licenses for Caris Paper Chart Composer;
- 03 licenses for S-57 Composer software.

New vessels:

The DHOC does not currently have an appropriate platform to carry out hydrographic surveys in deep water and in the EEZ of Morocco. To have a bigger hydrographic vessel, many meetings have been maintained with companies specialized in shipbuilding for the acquisition of a new hydrographic vessel with a lengh from 64 m to 70 m and equipped with all hydrographic and oceanographic materials to survey all the Moroccan coasts.



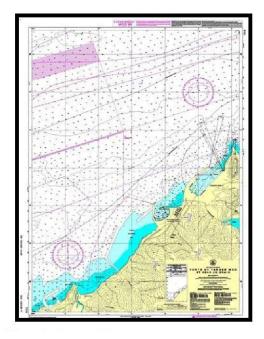
Survey boat H01

3. New charts and updates:

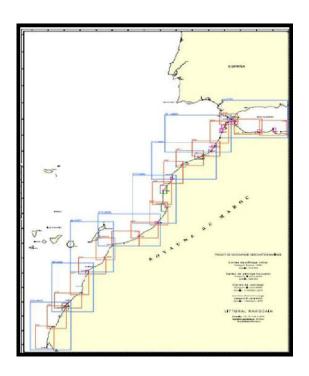
-ENCs: None

-RNCs: None

-INT charts: Modification of the Discretionary Separation Trafficking (DST) of the paper chart MA 1114 (Tanger Med)



Paper Chart MA 1114 of Tanger Med



The cartographic cutting plan established by the DHOC

4. New Publications and updates:

- New publications: publishing tide tables of Moroccan ports for the years 2014 and 2015.

5. MSI:

The dissemination of nautical information is currently provided by the Direction of Ports and Maritime Public Domain.

The Decree that was published on October 30, 2014 has requested that all the national organizations concerned by the hydrographic field are required to provide all nautical information that they hold to the DHOC so that she can be able to perform tasks assigned to it.

6. <u>C-55</u>: the update of this publication will be done when the new survey in the Mediterranean Sea will be accomplished.

7. Capacity building:

7.1 Trained staff:

7.1.1 hydrography:

- One petty officer was formed as hydrograph CAT B at the SHOM in 2013/2014;
- With the assistance of the SHOM, a hydrographic course was created in Training Center of the Moroccan Royal Navy for 15 petty officers.

7.1.2 Cartography:

According to the administrative agreement, every year, a cartographic engineer, came from the SHOM in order to supervise the elaboration of the new charts and sensitize the cartographic staff about the new updates and standards.

7.2. <u>Needs</u>:

With the increase of needs for the hydrographic surveys and the expectation of the acquisition of the new hydrographic vessel, several training will be scheduled in 2015 for filling the lack of personal specialized in hydrography, nautical publication and the management of the hydrographic, cartographic and oceanographic systems and networks.

DESIGNATED STAFF	SPECIALTY	TRAINING SITE	DURATION	OBSERVATIONS
1 officer	Hydrographic engineer	ENSTA en France	2 years	
1 officer	Electronics engineer	ENSTA en France	2 years	
1 officer	Hydroph category A	IHM in Spain	8 months	Bilateral cooperation
1 officer	Training about maritime delimitation tools	SHOM en France	2 weeks	Bilateral cooperation
1 officer	Nautical publication	SHOM en France	2 months	Bilateral cooperation
1 Petty officer	Management of the hydrographic, cartographic and oceanographic systems and networks	SHOM en France	7 months	Bilateral cooperation
1 Petty officer	Hydrograph category B	IHM in Spain	10 months	Bilateral cooperation
10 Petty officers	Hydrograph	Training Center of the Moroccan Royal Navy	10 months	Supervised and provided by the SHOM

7.3. Bilateral Projects:

In 2008, a French-Moroccan administrative agreement was signed by both parties to allow the Royal Navy to have the support of France through the SHOM to develop its expertise in the fields of hydrography, oceanography and marine cartography, and enable Morocco to assume its international obligations in hydrography under SOLAS convention. This agreement was followed by a 2008-2013 action plan and then extended by a second action plan for 2014-2018.

This cooperation includes:

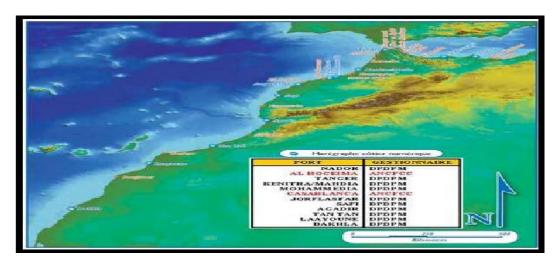
- Training of 05 hydrographers (CAT B) and 05 cartographers.
- Training in marine cartography at the SHOM of an engineer officer laureate from ENSTA in France;
- Training of an officer for the validation of hydrographic data at the SHOM;
- Coproduction of three paper charts and two ENCS (one is in progress);
- Cartographer expert from the SHOM visit each year the DHOC to train the Cartographers team;
- conducting hydrographic surveys in Moroccan coast in collaboration with SHOM;
- An expert from the SHOM came to the DHOC in order to provide assistance for a period of 13 months and help the DHOC to achieve its objectives .

8. Oceanographic activities:

a-General: None

b-GEBCO and CBI's activities: None

c-<u>Tidal networks</u>: The DHOC has access to tide data collected by the Direction of Ports and Maritime Public Domain, National Meteorology Direction and the National Agency of Land Conservation, Cadastre and Cartography.



Tidal networks located in the national territory.

d-New equipment: None

9. Other activities

9.1 Participation in IHO activities:

- Morocco hosted the 13th EAtHC at Casablanca on September 2014, since then the DHOC performs the chair of EAtHC until the next 14th EAtHC that will take place on October 2016 in Spain;
- The DHOC has participated in the 5th International Extraordinary Hydrographic Conference that was organized in Monaco on October 2014.
- The DHOC has participated in the 7th Inter Regional Coordination Comity that was hosted in Mexico on June 2015.

9.2 Activities related to the environment:

- The DHOC has participated in the regional workshop on tsunami warning and emergency response that was organized in Rabat on September 2014;
- On November 2013, The DHOC has participated in the seminar on the meteorology sector.

10. Conclusion:

The creation of a National Hydrographic Service whose duties will be handled by the DHOC is a strong commitment of Morocco in its vision to improve the hydrography field. Besides, the expert from the SHOM who works in coordination with the DHOC for a period of 13 months in order to create the first National Hydrographic Service is the best illustration of the commitment of the DHOC to enhance the hydrographic field.

In terms of production of paper charts and ENCs, the DHOC always performs the steps of preparing and drafting. Validation of cartographic data and editing maps are provided by the SHOM.

For Hydrographic Surveys, the Division will continue its survey programmed on the Moroccan coast.