

**REPORT OF THE KINGDOM OF MOROCCO
THE MEDITERRANEAN AND BLACK SEAS HYDROGRAPHIC COMMISSION
XVIII th CONFERENCE**

1. Hydrography, Oceanography and Cartography Division:

General:

Launched in 1986 with the help of Naval Oceanographic Office (NAVOCEANO) as the Hydroser, and in 2007 it became Hydrography, Oceanography and Cartography Division (DHOC)

2. Surveys:

Coverage of new surveys: in the framework of bilateral cooperation in hydrography and Cartography between Morocco and France, SHOM conducted hydrographic surveys in 2009 in the coast of Essaouira (Atlantic coast), and in 2011 Northern kingdom in the Strait of Gibraltar. We finished surveying Casablanca harbor and approaches in February 2013. We are conducting a new survey of the Mohammadia harbor and approaches with hydrographic survey launch.

Technology or new equipment:

Acquisition:

- Single beam echo sounder with a centimetric positioning system (RTK).
- A kit RTK for geodesic survey.
- A multibeam, single beam echosounder and sidescan sonar with a centimetric positioning system (RTK).

New vessels:

Acquisition of a hydrographic survey launch equipped with a multibeam, single beam echosounder and a sidescan sonar for surveys in shallow waters.

Problems:

The DHOC does not currently have appropriate platform to carry out hydrographic surveys in deep water.

3. New maps and update:

Maps

- ENC's: Two enc's in coproduction with SHOM FR377020 and FR377040
- RNC's: None
- Maps INT's: Two maps at a scale of 1:10 000 of Casablanca and Mohammedia harbors are undergoing the final revision, editing is expected in 2013 (in co-production with SHOM)
- Chart paper: Three maps (scale 1:150 000, 1:50 000 and 1:12 500) are being prepared in collaboration with the SHOM.

Other cards: None

Distribution of ENC's: None

4. Publications and update:

New publications: publishing tide tables of Moroccan ports.

Problem: lack of personnel specialized in nautical publication.

5. MSI:

Existing communications infrastructure:

Dissemination of nautical information is provided by the Direction of Ports and Maritime Public Domain under the Ministry of Equipment and Transport.

6. S-55: R.A.S.

7. **Capacity building**:

a- **Personnel Training**:

a.1 **hydrography**:

- One hydro (BS) training at SHOM in 2012/2013
- One hydro (BS) training at SHOM in 2013/2014

a.2 **Cartography**

- Two officers attended a course in hydrographic data and digital nautical charting in Korea from 7 October to 3 November 2012
- Training in 2013 : None

b-**Needs**:

- Formation of hydrographic engineer.
- Specialization in nautical publications.
- Team training in photogrammetry.

c-**Bilateral project**:

A memorandum of understanding signed on 26 October 2011 with U.S Navy in matter of hydrography and oceanography

8. **Activities in Oceanography**

a- **General**: None

b- **GEBCO activities and CBI**: None

Tidal networks: the Direction of Ports and Maritime Public Domain has a network of digital gauges. DHOC has access to the data from these gauges.

New equipment:

acquisition of to digital gauges.

Problem encountered:

The DHOC has not currently available neither a platform for deep water nor staff specialist in oceanography.

7. **Conclusion**:

The priority of DHOC is to update harbors bathymetric data and the production of the concerned charts. Till now the publication of paper charts is provided by SHOM.