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National Report - Ghana

Introduction

Although a littoral nation with a coastline of about 520km, Ghana is currently not a member of the International Hydrographic Organization (IHO) but on a few occasions attended the EAtHC meetings as an observer.

1.0 Hydrographic Office/Service

1.1 Hydrographic organizations

The Ghana Maritime Authority (GMA) superintends on issues that borders on safety of navigation in Ghanaian waters, hydrographic surveying included. There is a Hydrographer who acts as a coordinator on Hydrographic survey issues.

The Ghana Ports and Harbours Authority (GPHA), also with the mandate of developing, operating and managing ports in Ghana, have the responsibility of conducting hydrographic surveys within and at the approaches to the ports to ensure safety of navigation in the ports. GPHA maintains a Survey team that is responsible for both land and hydrographic survey for the ports.

The Ghana National Petroleum Corporation (GNPC), the statutory body in charge of oil exploration in Ghana coordinates oil exploration activities in Ghanaian waters and hence are involved in some level of hydrographic surveying activities.

Ghana currently has no Hydrographic Office/ Service in place

1.2 National Hydrographic and Oceanographic Committee

A National Hydrographic and Oceanographic Committee (NHOC) was put in place in 2015 with the ultimate aim of it being a route to the formation of a National Hydrographic office. The NHOC is made up of representatives of all identifiable government supposed to be involved in hydrographic survey and oceanographic activities. The committee is under the umbrella of the GMA. The objective is encourage members to make data they collect from their various agencies available to the committee and to the GMA for management and dissemination where necessary. Further to that, a National Hydrographic Database office has been set up at the Ghana Maritime Authority to serve as a central point for the collation of hydrographic data.

2.0 Surveys

Hydrographic surveying is mainly done in the ports by the Ghana Ports and Harbour Authority (GPHA) within the port, the approaches to the Ports and on other port related activities such as on the currently ongoing port expansion projects.

Surveys for oil exploration is done by international oil companies in the Economic Exclusive Zone (EEZ) under the auspices of the GNPC. Data from such surveys are currently not available to the GMA. The NHOC has the responsibility of gathering all such survey data for the GMA in the future.



On -going Port Expansion project in Tema

Local charts are produced only for the ports and the approaches. Data from surveys of the ports and that from surveys done by contractors are supposed to be channeled through the GMA to The UKHO but that has not been adhered to, mainly due to the lack of expected cooperation between agencies.

2.1 New technologies

GPHA has acquire an entry level Multibeam Echo Sounder (Teledyne's MB1) with internal DMS5-25 motion sensor and a HYPACK-HYSWEEP multibeam data acquisition & post-processing software for port surveys.

The National Hydrographic Database office has been equipped with the following:

- Two (2) dedicated workstations;
- ArcGIS for Maritime (software)
- Printer/plotter

3.0 New charts and updates

Ghana does not have the capacity to produce ENCs, RNCs and INT charts The UKHO is the primary charting agency.

It is the responsibility of the Ghana Maritime Authority (GMA) to collate data from surveys done by the various hydrographic agencies for onward transmission to the UKHO.

Since there is literally no capacity for hydrographic surveying in Ghana besides that of the GPHA, the only updates comes from the ports.

4.0 MSI

Maritime Safety Information is broadcast on VHF by the ports and the GMA VTMIS (Vessel Traffic Management Information System) centres.

4.1 E-Navigation

An E-navigation system (Niord system) has been developed in collaboration between the Ghana Maritime Authority and the Danish Maritime Authority for promulgating navigational warnings and notices to mariners. Navigational hazards are communicated to users instantly and in a graphical format. The Niord system will enhance the safety and security of all users of the maritime domain in Ghana.

5. Capacity Building

These are currently no planned programmes in place for capacity building. Most hydrographic practitioners lack the requisite practical skills and there is the need for

identify the training needs agency- by -agency to come out with an effective capacity training programme to address the hydrograhical problem of Ghana.

In general the current situation in Ghana calls for a serious approach capacity building in Hydrographic surveying as the ports are expanded to receive deep draft vessels.

6. Oceanographic activities

6.1 Tidal gauges

Ghana until 2014 could boast of one of the oldest tidal gauge in the sub-region. The tidal gauge at Takoradi was damaged in the wake of the Takoradi Port Expansion. Plans are in place to re-install new tidal gauges in Takoradi and Tema (at the Ports) to be part of the Global Sea Level Observation System (GLOSS) once again. It is expected that the gauges, which are to be install together with integrated weather stations will be operational by mid-year 2019.

7.0 Membership to the IHO

Cabinet approval has just been received for Ghana to become a member of the IHO. It is expected that all the necessary actions will soon be put in place towards the attainment of membership status with the IHO.

8.0 Conclusion

Hydrography is gradually getting the needed attention from the government of Ghana. It is expected that with the sustained enthusiasm from all stakeholders and the necessary capacity building programmes, Ghana will soon be a proud member of the IHO.