

NIGERIA NATIONAL REPORT



14TH EASTERN ATLANTIC HYDROGRAPHIC COMMISSION CADIZ – SPAIN 18TH – 20TH October 2016

INTRODUCTION

1. Nigeria is a littoral nation with a coastline of about 420 nautical miles and a network of over 3000 interconnecting rivers and creeks. It also has an Exclusive Economic Zone (EEZ) of about 62,000 square nautical miles. The Nigerian Navy (NN) is the agency statutorily charged with the responsibility of hydrographic surveying and nautical charting of Nigerian waters. This mandate is discharged through the Nigerian Navy Hydrographic Office (NNHO). In this regard, the NNHO corporates closely with the Nigerian Ports Authority (NPA), Nigerian Maritime Administration and Safety Agency (NIMASA) and Nigerian Inland Waterways Authority (NIWA) who have mandates for hydrographic surveying within their various jurisdictions.

2. During the period under review, Nigeria made appreciable efforts to improve on her hydrographic surveying capacity and capability. This report will give highlights of Nigerian hydrographic organizations and their activities.

HYDROGRAPHIC ORGANISATIONS IN NIGERIA

3. **Nigerian Navy Hydrographic Office**. The NNHO is the lead agency for hydrographic surveying in Nigeria and has overall superintendence of all hydrographic and oceanographic surveys in Nigerian waters up to the limits of the EEZ. The Office is headed by the Hydrographer of the NN who doubles as the National authority on hydrographic, oceanographic, charting and tidal matters. He represents the Federal Government of Nigeria in international meetings and forums on hydrographic and oceanographic matters. The Hydrographer is assisted by two Deputy Directors and a number of staff officers. The organogram of the NNHO is as shown below.



4. **Nigerian Ports Authority**. The NPA Hydrographic and Dredging Department is responsible for all hydrographic survey and dredging operations within the maritime limits of individual port complexes. They are also responsible for the establishment and maintenance of all aids to navigation within the harbor and approaches to the ports. In some cases, these duties are performed through joint ventures agreements with private stakeholders. Where such arrangements exist, it is the responsibility of the joint venture to survey the channels and dredge when necessary.

5. **Nigerian Maritime Administration and Safety Agency**. The Hydrographic Survey Services Unit of NIMASA was established in 2005. Some of their responsibilities include hydrographic surveying and removal of wrecks within shipping routes in Nigerian waters, in support of safety of navigation. This mandate is executed through collaboration with the NNHO. The Unit is headed by an officer of the NN and operates under the direct supervision of the Executive Director of Maritime Safety and Shipping Development.

6. **Nigerian Inland Waterways Authority**. The NIWA was established in 1997 with the primary responsibility of improving and developing Nigeria's inland waterways for navigation. Accordingly, they are responsible for the hydrographic survey and removal wrecks the Nation's inland waterways. Also, they undertake capital and maintenance dredging of the inland waterways outside the jurisdiction of the Port Authority.

SURVEYS

7. **Coverage of New Surveys**. NPA in conjunction with its Joint Venture Partners, created the Lagos Channel Management and Bonny Channel Management companies to manage the Lagos and Bonny channels respectively. These companies carry out routine hydrographic surveys and maintenance dredging of the Lagos and Bonny Channels. The Lagos harbour and Port Harcourt channels are maintained at minimum depths of 13.5m and 7m respectively. Also, a total of 88 critical wrecks were removed from both Channels during the period under review. Furthermore, the NNHO surveyed parts of Apapa harbour up to Break Waters. Other minor surveys for naval operations carried out during the period under review include surveys of Badagry Creek, Nana River, Benin River, Nembe Creek and Cawthorne Channel among others. Most of these surveys were conducted by the NNHO.



Fig 2. Wreck Removal by Nigeria Ports Authority



Fig 3. Hydrographic Survey of Lagos Channel

MARITIME SAFETY INFORMATION

11. The NNHO is the coordinator for Maritime Safety Information (MSI) in Nigeria. It collates navigation significant information from relevant stakeholders. Coastal warnings are disseminated to merchant shipping through NIMASA's radio communication services. Presently, broadcast is

via VHF as there are no operational NAVTEX stations. Navigational warnings are also circulated through e-mail to UKHO and to NAVAREA II Coordinator (France) for dissemination through Notices to Mariners and INMARSAT transmissions. A MSI portal was recently established in NIMASA under the Hydrographic unit but it is not yet operational.

CAPACITY BUILDING

8. **Training**: The NN has continuously trained its officers and men both locally and in foreign institutions. The Nigerian Navy Hydrographic School (NNHS) offers only the Survey Recorder (SR) courses namely: SRIII and SR II courses. Some of the hydrographic training achievements during the Period under review include:

a. Two Navy officers from the NNHO have successfully completed a Cat 'A' Masters in Hydrographic surveying in the University of Southern Mississippi as part of the Republic of Korea Capacity Building Project.

b. Two Navy officers are attending the Officers' Long Course Hydrography in India.

c. Four Navy officers have completed the Basic Hydrographic Surveying Course at Bangladesh, India and South Africa, while one is presently on course in India.

d. Two officers from the NNHO are billed to attend the HYPACK Multi-beam Training Course in Canada September this year.

e. Two Navy personnel completed Survey Recorder 'Q' course in India.

f. Two Navy officers attend the Southern Africa and Islands Hydrographic Commission (SAIHC) Capacity Building Work Program: Phase 1 Skills Training Course, Walvis Bay, Republic Of Namibia

In spite of the progress made in hydrographic training, the NNHO still lacks nautical cartographers and oceanographers. Accordingly, it is open to any training opportunity in these areas. Other areas of professional deficiency are in database management and Geographic Information Science (GIS).

9. **Commencement of Pre Basic Hydrographic Course**. The NN has initiated efforts to commence a Pre Basic Hydrographic Course at the NNHS. The course, which is to serve as a precursor to an IHO accredited Cat "B" Hydrographic Course, is designed to prepare NN officers for the IHO Cat "B" Hydrographic course usually attended in foreign institutions. Also, it serves to prepare officers for duties onboard survey vessels pending the availability of training billets for IHO accredited courses. The curriculum for the course is based on the IHO approved syllabus for Cat "B" training in hydrographic surveying. All items including accommodation, survey equipment and a patrol boat have been provided for the commencement of the course.

10. **Acquisition of Hydrographic Equipment**. The NNHO recently acquired some hydrographic equipment. These include Echotrack CVM Dual Frequency Echosounder, Digibar Sound velocity Profiler, Valeport Tide Master, HYPACK and CARIS application Software. It worth mentioning that the hydrographic organizations in Nigeria leverage on each other's equipment holding to carry out their survey responsibilities.

11. **Acquisition of Survey Boats**. The NN recently allocated 2 EPENAL E-27 patrol boats to NNHO for use as vessels-of-opportunity for hydrographic survey pending the acquisition of a dedicated hydrographic vessel. The boats would help to enhance the survey capability of the Office and ensure that nautical charts are updated based on current information necessary for safe navigation. Furthermore, efforts have reached an advanced stage to acquire a dedicated survey vessel for the NNHO.



Fig 4. Single beam survey using an EPENAL E-27 Patrol Boat

12. **Development of a Training Chart.** The NNHO is currently developing a training chart for the training of NN personnel. The notion of the training chart is to train NN personnel with charts of areas in which they are most likely to operate. The project strove to include navigational peculiarities available in Nigeria waters as well as those found in foreign maritime environment. Also, the chart development process is helping the NNHO build capability for the production of actual nautical charts.

13. **Upgrade, Accreditation and Recognition of Nigerian Navy Hydrographic School as a Regional Centre for Hydrographic Survey Training**. The NNHO in September 2012 forwarded a proposal to EAtHC for IHO assistance in the upgrade and possible accreditation of the courses offered at the NNHS. It also sort for the recognition of the NNHS as a centre of excellence in hydrographic survey training in West Africa. The proposal was at the behest of the then Chairman of the EAtHC sequel to an earlier application by the NNHO for IHO accreditation. A 3-phase schedule of activity was proposed starting with an assessment visit by a team of IHO experts to the school. However, since the submission of the proposal, the NNHO is yet to hear from the EAtHC. Accordingly, the NNHO is deprived of the necessary guidance required to actualize the accreditation of the courses offered by the NNHS. It is therefore requested that action on the proposal submitted by the NNHO be expedited to enable the upgrade, accreditation and possible recognition of the NNHS as a centre of excellence for hydrographic training. It is pertinent to note that an upgraded and accredited NNHS would provide cheaper, qualitative and timely training for hydrographic surveyors in Nigeria and the West African sub region.

CONCLUSION

14. Nigeria has made appreciable improvement in her survey capability and capacity during the period under review. Maintenance surveys have been carried out regularly in the Lagos and Bonny Channels. Also various survey equipment and software have been acquired. Furthermore, a number of officers are currently undergoing various CB programmes in hydrography.

15. Despite the progress made so far, the NNHO still lacks nautical cartographers, oceanographers and database managers. Additionally, the NNHO is still awaiting the response of the EAtHC on the proposal to upgrade, accreditation and possible recognition of the NNHS as a regional centre of excellence.