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18TH CONFERENCE OF THE EASTERN ATLANTIC HYDROGRAPHIC COMMISSION





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THEME FOR THE PRESENTATION

TWENTY YEARS OF CAPACITY-BUILDING ACTIONS IN EATHC: ASSESSMENTS AND PROSPECTS

BY

NIGERIA



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INTRODUCTION





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INTRODUCTION

❖ **The Nigerian Navy Hydrographic Office (NNHO) was established in 1976 to handle the hydrographic functions of the Navy which include conduct of hydrographic and oceanographic surveys for defense and civil requirements, production of navigational charts and nautical publications, superintendence of all hydrographic activity in Nigerian waters among others.**

❖ **NNHO has made significant progress in its hydrographic capability which has enabled it effectively discharge its responsibilities especially in the last 20 years. This progress encompasses platform and equipment acquisition, processing systems, human capacity development and collaborations among others.**



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AIM

To acquaint members of the Eastern Atlantic Hydrographic Commission on the progress achieved by NNHO in the past 20 years.



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SCOPE

- ❖ **Responsibilities of the Nigerian Navy Hydrographic Office**
- ❖ **Organisational Structure of the NNHD**
- ❖ **Significant Areas of Progress in the Past 20 Years**
- ❖ **Enabling Factors That Contributed to the Progress**
- ❖ **Challenges/Limitations Affecting NNHO Operations**
- ❖ **NNHO Future Plans**



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RESPONSIBILITIES OF THE NIGERIAN NAVY HYDROGRAPHIC OFFICE





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RESPONSIBILITIES OF THE NNHO

- a. Superintendence of hydrographic and oceanographic surveys in Nigerian waters, including the Exclusive Economic Zone.**
- b. Acting as the sole national charting authority.**
- c. Publication and distribution of nautical charts and publications.**
- d. Promulgation of radio navigational warnings and national NAVAREA II coordinator.**
- e. Represents the Federal Government of Nigeria in international bodies and forums on hydrographic and oceanographic matters.**



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ORGANISATIONAL STRUCTURE OF NNHD





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ORGANISATIONAL STRUCTURE OF NNHD





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ORGANISATIONAL STRUCTURE OF NNHD (CONT)

NIGERIAN NAVY HYDROGRAPHIC OFFICE

1. THE NNHO IS HEADED BY THE HYDROGRAPHER OF THE NAVY.

2. NNHO IS THE COORDINATING CENTRE OF THE NNHD





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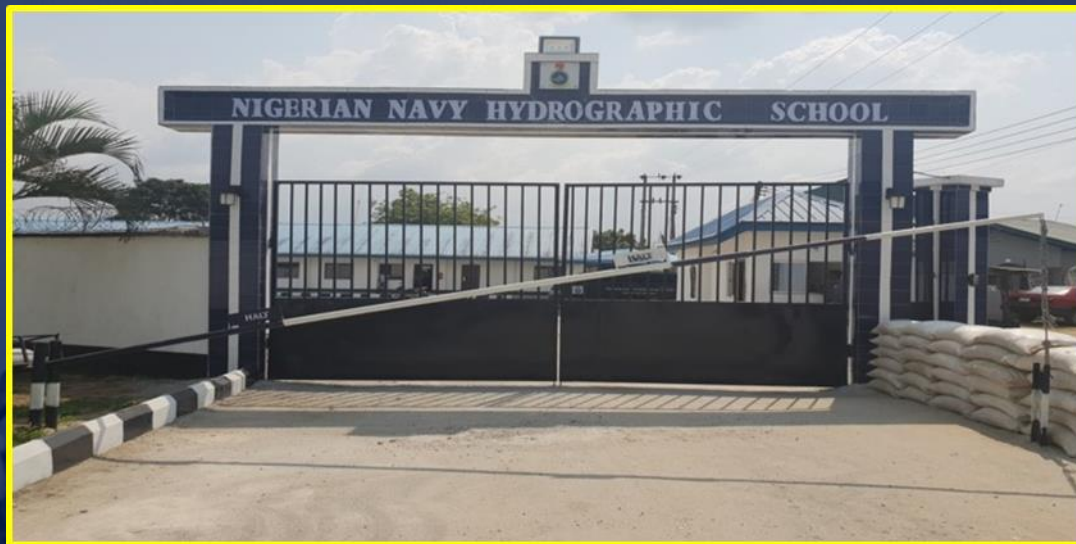
ORGANISATIONAL STRUCTURE OF NNHD (CONT)

NIGERIAN NAVY HYDROGRAPHIC SCHOOL

**ESTABLISHED IN 1981
FOR THE PURPOSE OF
DEVELOPING MANPOWER
FOR THE NNHD.**

**CONDUCTS BASIC
HYDROGRAPHY COURSE
FOR OFFICERS, SURVEY
RECORDER III AND
SURVEY RECORDER II
FOR RATINGS.**

**CURRENTLY WORKING
TOWARDS
ACCREDITATION OF THE
BASIC HYDROGRAPHY
COURSE BY THE IHO.**



Students of Officers Basic Course 1



Ratings Survey Recorder Course II



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ORGANISATIONAL STRUCTURE OF NNHD (CONT)

SURVEY FLEET

NNS LANA - OFFSHORE SURVEY VESSEL



NNS ZHIZOKO - OFFSHORE SURVEY VESSEL



**SURVEY
LAUNCH**



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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS





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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS

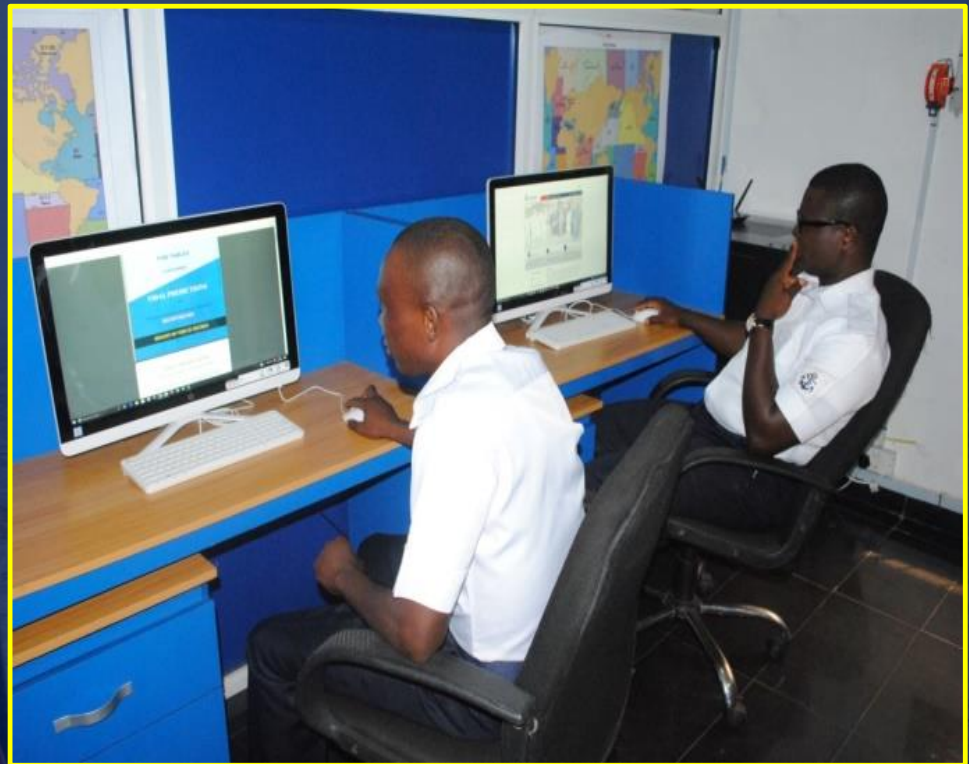
ESTABLISHMENT OF MARITIME SAFETY INFORMATION INFRASTRUCTURE

MSI UNIT

**ESTABLISHED – NOV 2017
MANNED – 24HRS DAILY**

**THE MSI UNIT RECEIVES
AND DISSEMINATES VITAL
INFORMATION REGARDING
UNCHARTED NAVIGATIONAL
DANGERS THAT ARE OF
CONCERN TO BOTH
MERCHANT MARINERS AND
NN VESSELS, VIA ITS
PORTAL WWW.NNHO.NG**

**IT ALSO DISSEMINATES
NOTICES TO MARINERS FOR
UPDATE OF OWN CHARTS.**



NNHD Personnel in the MSI Unit



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ESTABLISHMENT OF MARITIME SAFETY INFORMATION INFRASTRUCTURE (CONT)

THE 'HYDROGRAPHIC NOTE' MOBILE APPLICATION RECENTLY DEVELOPED BY NNHO AND MADE AVAILABLE FOR DOWNLOAD ON THE GOOGLE PLAY STORE IS CURRENTLY BEING USED BY SCORES OF ACTIVE USERS FOR QUICK REPORTING OF UNCHARTED NAVIGATIONAL HAZARDS TO THE NNHO MSI PORTAL

NNHD LEVERAGES EXISTING NN STRATEGIC PARTNERSHIP WITH THE FRENCH NAVY HYDROGRAPHIC OFFICE TO BROADCAST ITS MSI MESSAGES TO MARINERS OPERATING WITHIN NAVAREA II, COVERING THE ENTIRE EAST ATLANTIC OCEAN REGION.

NNHD Personnel in MSI Unit

NIGERIAN NAVY HYDROGRAPHIC OFFICE
HYDROGRAPHIC NOTE
For reporting navigational dangers and changes observed at sea by mariners.

***FORM FIELD REQUIRED:**

*General
 Locality: Station Date:
 *Chart(s):
 *Method: Station/Coordinate No:
 ENC(s) affected:

***DETAIL OF CHANGES/DANGER OBSERVED**

*Date of Observation: *Time Observed (UTC):

POSITION OF DANGER OR FEATURE DESCRIBED ABOVE

*Latitude: *Longitude: Position Method: Vertical Datum:

Position System Details:

Sextant Angle Details: (If Available)

Echo Sounder: Transducer Depth:

Used:

Accompanying Plots and Photographs: Select A File To Upload: No file chosen (If any)

VESSEL AND OBSERVER DETAILS

*Vessel Name: *Vessel Type:
 *Master/Observer's Name: Signature:
 *Email: *Telephone:
 Fax: Other:

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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

SURVEY OPERATIONS

❖ **NNHO** has ramped up her hydrographic capabilities during the period under review. The acquisition of inshore survey platforms has facilitated the conduct of several hydrographic surveys were collected within Lagos inland waterways, Lagos Harbour entrances, Badagry Creek, Lower River Niger among others.

❖ The newly acquired Ocean Survey Vessel (NNS LANA) has been on systematic offshore survey of Nigeria's coastal and offshore waters, starting with Approaches to Lagos which is almost completed with over 90% of the approaches already surveyed.





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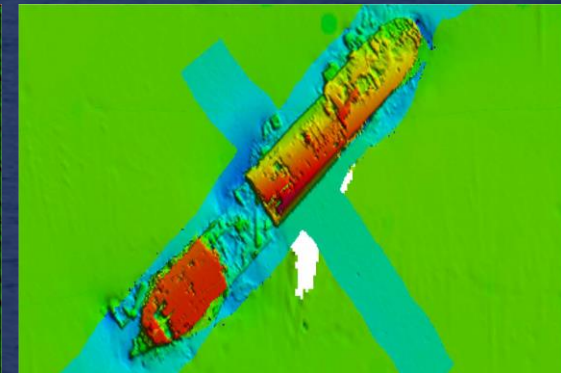
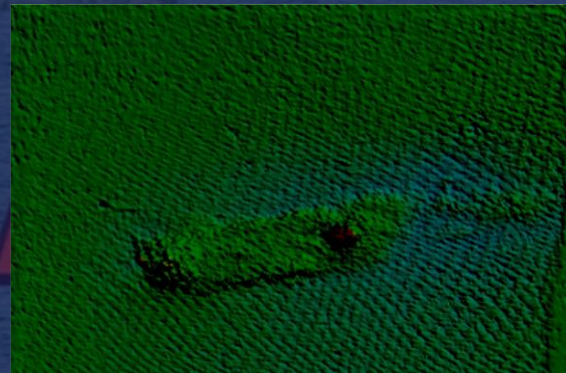
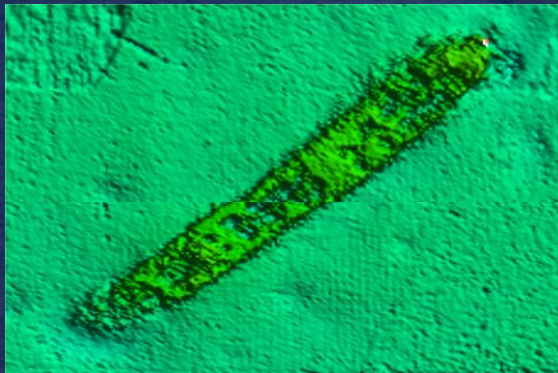
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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

SURVEY OPERATIONS (CONT)

❖ During the ongoing survey of Approaches to Lagos by NNS LANA, over 20 previously unidentified wrecks were discovered along with undersea features, thereby enhancing navigational safety and improving knowledge of our waters.





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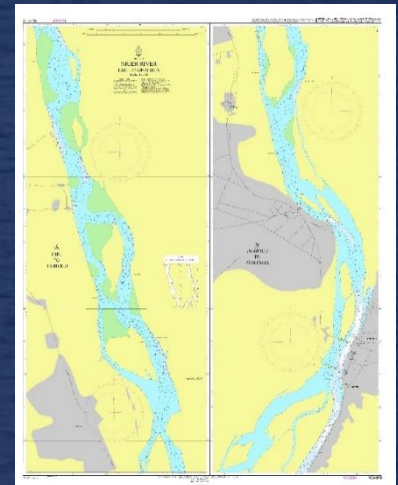
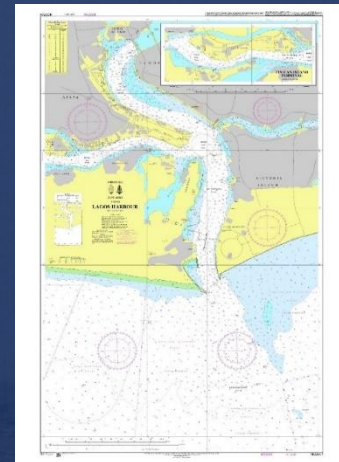


SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

NAVIGATIONAL CHART / PUBLICATION PRODUCTION

❖ During the period under review, the NNHO, as the sole charting authority for Nigeria has successfully produced a total of 17 paper charts and 33 cells of electronic navigational charts. Some of the paper charts include:

- ✓ **Lagos Harbour (NG2501)**
- ✓ **Lagos Lagoon**
- ✓ **Lekki Lagoon**
- ✓ **Lower River Niger Series**
- ✓ **Oguta Lake**
- ✓ **River Alape in Ondo State to Apapa in Lagos**





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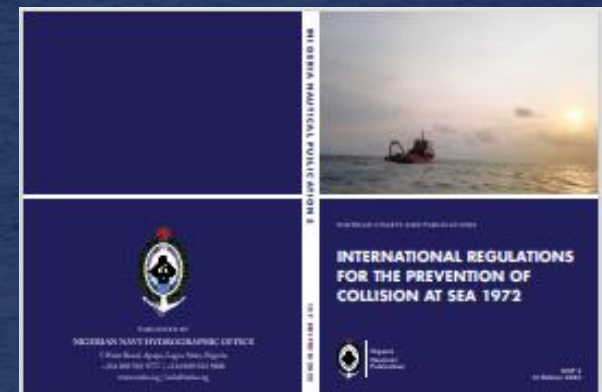
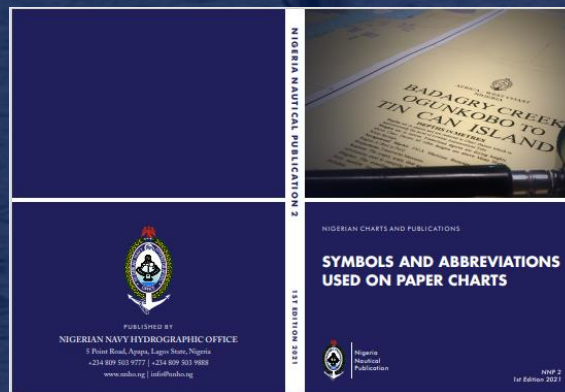
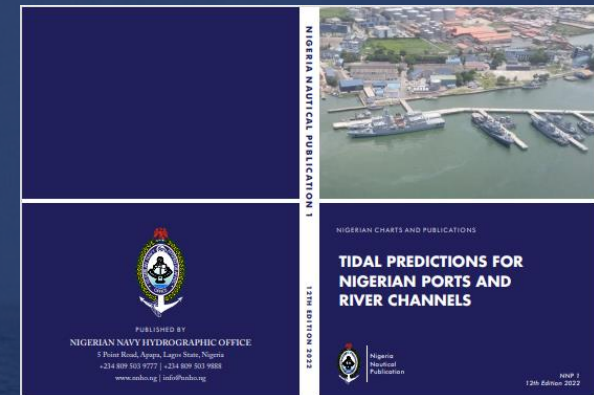


SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

NAVIGATIONAL CHART / PUBLICATION PRODUCTION (CONT)

❖ Furthermore, NNHO has produced several nautical publications which are listed Lagos Lagoon

- ✓ Tidal Predictions for Nigerian Ports and River Channels.
- ✓ Symbols and Regulations used on Paper Charts.
- ✓ International Regulations for the Prevention of Collision at Sea 1972.





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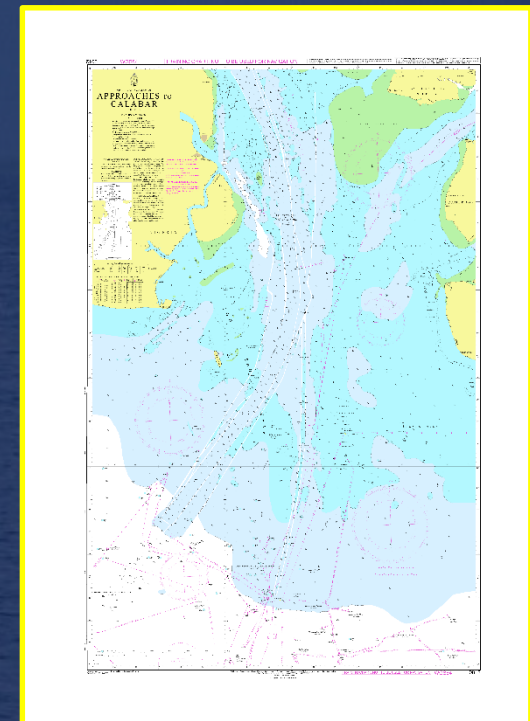
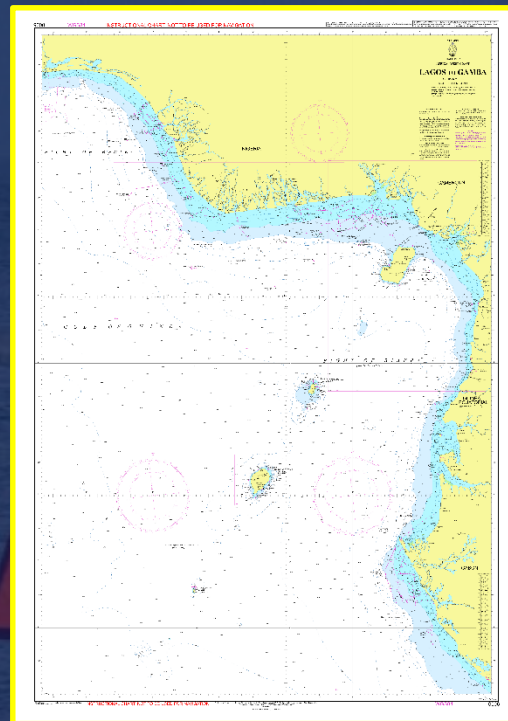
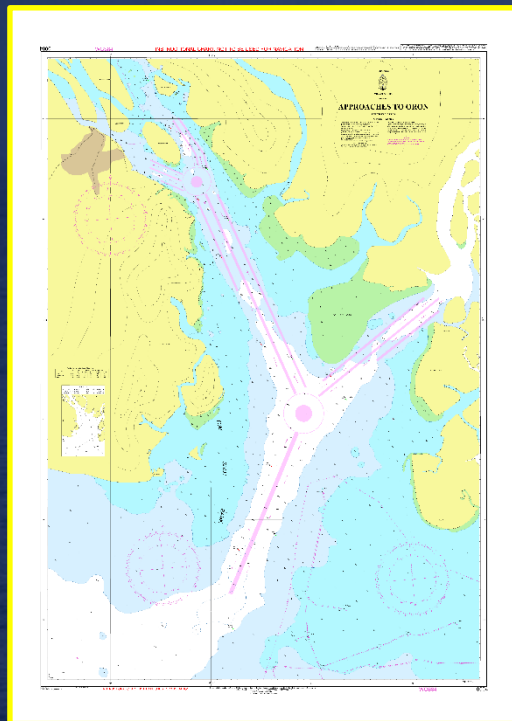
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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

PRODUCTION OF TRAINING CHARTS

Previously, the NN solely relies on UKHO to meet its needs for training charts and other nautical publications. However, with the recent development of charting capacity by the NNHO, the NN now has all its needs for training charts being produced by the Office.





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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

CAPACITY BUILDING

NNHO has recognized the significance of capacity building in the overall development of hydrography in Nigeria has emplaced mechanisms to develop skills in personnel through:

- ✓ adequate on-the-job training and transfer of knowledge.
- ✓ leveraging on existing partnerships with international partners like NIPPON Foundation, UKHO and other reputable hydrographic training institutions to source for gratis training billets.
- ✓ domestication of the Officers Basic Hydrographic Courses being undertaken at the NNHS.





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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

RELATIONSHIP WITH LOCAL AND INTERNATIONAL STAKEHOLDERS

The NNHO interacts with both local and international stakeholders on hydrographic matters.

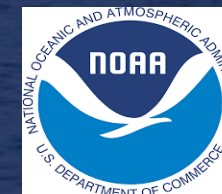
✓ LOCAL STAKEHOLDERS

- Nigerian Ports Authority (NPA)
- Nigerian Maritime Administration and Safety Agency (NIMASA)
- National Inland Waterways Authority (NIWA)
- University of Lagos
- NEXIM Bank



✓ INTERNATIONAL STAKEHOLDERS

- United Kingdom Hydrographic Office
- Service Hydrographique et oceanographique de la Marine (SHOM)
- Nippon Foundation – GEBCO Seabed 2030 Project





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SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

NOTABLE ACHIEVEMENTS

- a. Completion of the survey Oguta – Bonny maritime lane.**
- b. On-going survey and charting campaign of the Lekki Lagoon to Lagos Lagoon.**
- c. Surveyed approaches and parts of the Berth 14 at NPA jetty for berthing of USNS TRENTON during their port visit to Nigeria.**
- d. Completion of the survey of parts of Badagry Creek.**
- e. Successful completion of the survey of Navy Town Basin.**
- f. Ongoing survey of Approaches to Lagos by NNS LANA which is more than 90 per cent completed.**
- g. Publication of the following paper navigational charts;**
 - (1) NG4406 – Dangote Refinery.**
 - (2) NG4412 – Approaches to Jamata.**
 - (3) NG4413 – Lokoja to Owunene.**
 - (4) NG4414 – Owunene to Idah.**
 - (5) NG4415 – Idah to Ebu.**
 - (6) NG4416 – Ebu to Onitsha.**



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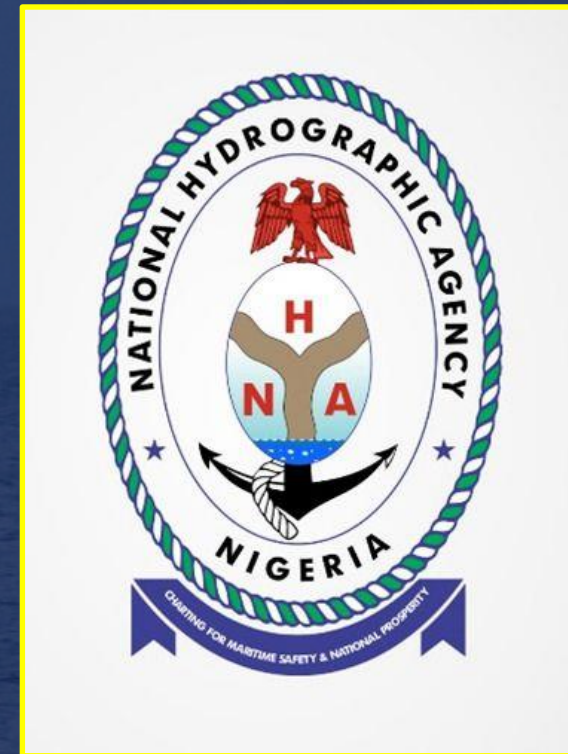


SIGNIFICANT AREAS OF PROGRESS IN THE PAST 20 YEARS (CONT)

ESTABLISHMENT OF NATIONAL HYDROGRAPHIC AGENCY

The Nigerian Hydrographic Agency Establishment Act 2021 which was signed by the President in 2022. This legislative action effectively transferred the responsibility for hydrographic and navigational charting matters from the Navy Hydrographic Office (NNHO) to the NHA. This transition marks a significant milestone in consolidating and enhancing Nigeria's hydrographic capabilities, thereby ensuring the integrity and safety of our maritime activities.

The President has also appointed the Hydrographer of the Federation and Chief Executive Officer of the Agency.





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ENABLING FACTORS THAT CONTRIBUTED TO THE PROGRESS





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ENABLING FACTORS THAT CONTRIBUTED TO THE PROJECT

- **Leadership Continuity.**
- **Collaboration with Stakeholders.**
- **Indigenous Capacity Building Efforts.**
- **Support from the Nigerian Navy.**



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CHALLENGES AFFECTING NNHO OPERATIONAL ACTIVITIES

- **Insufficient Modern Survey Equipment**
- **Inadequate Cartographic Facilities**
- **Inadequate Manpower Development/Management Plan**
- **Insufficient Funding**



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NNHO FUTURE PLANS





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NNHO FUTURE PLANS



- a. Prepare and execute an intensive 5-Year Survey and Charting Plan for NNS LANA to ensure total mapping of Nigeria's offshore maritime domain by 2026.**
- b. Installation of 4 standard automatic and integrated tidal observation stations along Nigeria's coastline.**
- c. Establish a network of precisely determined points to use as geodetic reference points to enhance the accuracy and reliability of NNHO charts and other nautical products.**
- d. Continue to build capacity for survey and nautical chart production through foreign and in-house training programmes.**
- e. Establishment of a Marine Spatial Data Infrastructure.**
- f. Continue liaison with UKHO, SHOM and other stakeholders within and outside Nigeria.**



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CONCLUSION





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Thank You for Your
ATTENTION

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